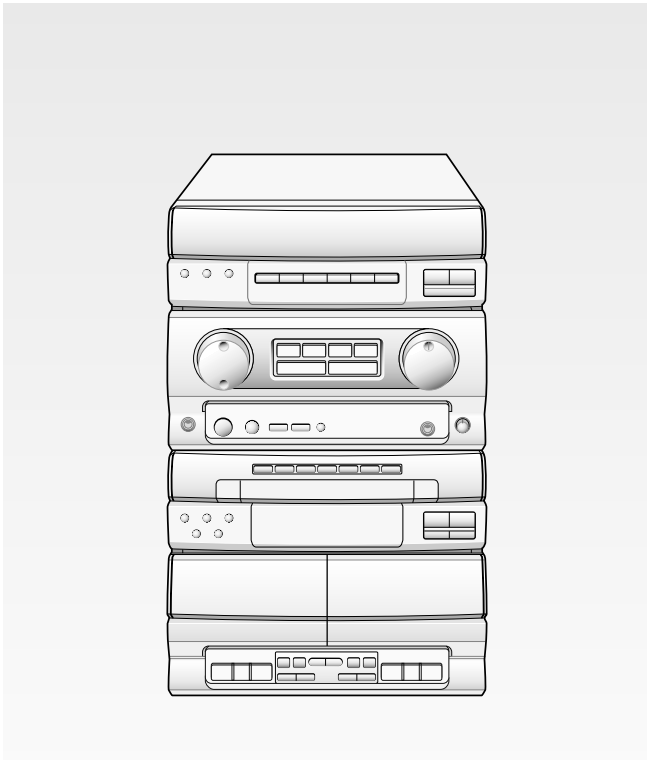
SAMSUNG

6+1 CD CHANGER MINI COMPONENT SYSTEM

MAX-670

SERVICE Manual

6+1 CD CHANGER MINI COMPONENT



CONTENTS

1. Precautions
2. Product Specifications
3. Disassembly and Reassembly
4. Alignment and Adjustments
5. Special Circuit Descriptions
6. Troubleshooting
7. Exploded Views and Parts List
8. Electrical Parts List
9. Block Diagrams
10. PCB Diagrams
11. Wiring Diagram
12. Schematic Diagrams

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Code No. AH68-20108A

1. Precautions

Follow these safety, servicing and ESD precautions to prevent damage and protect against potential hazards such as electrical shock and X-rays.

1-1 Safety Precautions

1. Be sure that all of the built-in protective devices are replaced.

2. When reinstalling the chassis and its assemblies, be sure to restore all protective devices, including control knobs and compartment covers.

3. Make sure that there are no cabinet openings through which people--particularly children--might insert fingers and contact dangerous voltages. Such openings include the spacing between the picture tube and the cabinet mask, excessively wide cabinet ventilation slots, and improperly fitted back covers.

4. Design Alteration Warning:
   Never alter or add to the mechanical or electrical design of the unit. Example: Do not add auxiliary audio or video connectors. Such alterations might create a safety hazard. Also, any design changes or additions will void the manufacturer's warranty.

5. Leakage Current Hot Check (Figure 1-1):
   Warning: Do not use an isolation transformer during this test. Use a leakage-current tester or a metering system that complies with American National Standards Institute (ANSI C101.1, *Leakage Current for Appliances*), and Underwriters Laboratories (*UL Publication UL1410, 59.7*).

   With the unit completely reassembled, plug the AC line cord directly into a 120V AC outlet. With the unit's AC switch first in the ON position and then OFF, measure the current between a known earth ground (metal water pipe, etc.) and all exposed metal parts. Examples: Handle brackets, metal cabinets, screwheads and control shafts. The current measured should not exceed 0.5 milliamp. Reverse the power-plug prongs in the AC outlet and repeat.

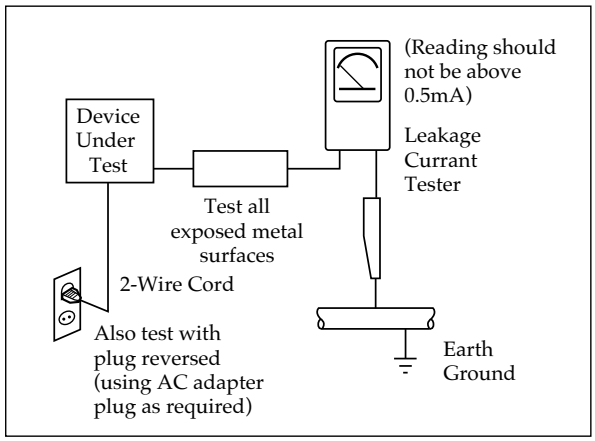

(Reading should not be above 0.5mA)
Device Under Test
Leakage Currant Tester
Test all exposed metal surfaces
2-Wire Cord
Also test with plug reversed (using AC adapter plug as required)
Earth Ground

Fig. 1-1 AC Leakage Test

6. Insulation Resistance Cold Check:
   (1) With the unit's AC plug disconnected from the AC source, connect an electrical jumper across the two AC prongs. (2) Set the power switch to ON. (3) Measure the resistance between the shorted AC plug and any exposed metallic parts. Example: Screwheads, antenna, control shafts or handle brackets.

   If any of the exposed metallic parts has a return path to the chassis, the measured resistance should be between 1 and 5.2 megohms. If there is no return path, the measured resistance should be "infinite." If the resistance is outside these limits, a shock hazard might exist. See Figure 1-2

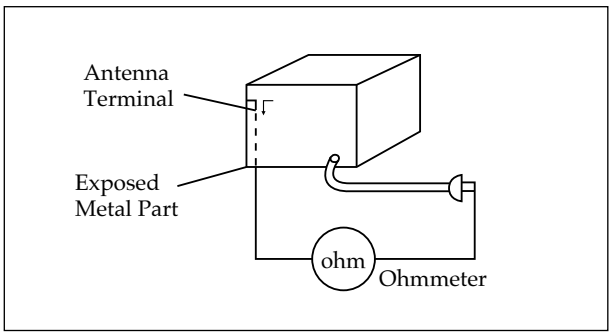


Fig. 1-2 Insulation Resistance Test

1-1 Safety Precautions (Continued)

7. Components, parts and wiring that appear to have overheated or that are otherwise damaged should be replaced with parts that meet the original specifications. Always determine the cause of damage or overheating, and correct any potential hazards

8. Observe the original lead dress, especially near the following areas: Antenna wiring, sharp edges, and especially the AC and high voltage power supplies. Always inspect for pinched, out-of-place, or frayed wiring. Do not change the spacing between components and the printed circuit board. Check the AC power cord for damage. Make sure that no wires or components touch thermally hot parts.

9. Product Safety Notice:
Some electrical and mechanical parts have special safety-related characteristics which might not be obvious from visual inspection. These safety features and the protection they give might be lost if the replacement component differs from the original--even if the replacement is rated for higher voltage, wattage, etc.

10 Components that are critical for safety are indicated in the circuit diagram by shading, ⚠ or ⚠ . Use replacement components that have the same ratings, especially for flame resistance and dielectric strength specifications. A replacement part that does not have the same safety characteristics as the original might create shock, fire or other hazards.

1-2 Servicing Precautions

Warning1: First read the "Safety Precautions" section of this manual. If some unforeseen circumstance creates a conflict between the servicing and safety precautions, always follow the safety precautions.

1. Servicing precautions are printed on the cabinet. Follow them.

2. Always unplug the unit's AC power cord from the AC power source before attempting to: (a) Remove or reinstall any component or assembly, (b) Disconnect an electrical plug or connector, (c) Connect a test component in parallel with an electrolytic capacitor.

3. Some components are raised above the printed circuit board for safety. An insulation tube or tape is sometimes used. The internal wiring may be clamped to prevent contact with thermally hot components. Reinstall all such elements to their original position.

4. After servicing, always check that the screws, components and wiring have been correctly reinstalled. Make sure that the portion around the serviced part has not been damaged.

5. Check the insulation between the blades of the AC plug and accessible conductive parts (examples: metal panels, input terminals and earphone jacks).

6. Insulation Checking Procedure: Disconnect the power cord from the AC source and turn the power switch ON. Connect an insulation resistance meter (500V) to the blades of the AC plug.

   The insulation resistance between each blade of the AC plug and accessible conductive parts (see above) should be greater than 1 megohm.

7. Never defeat any of the B+ voltage interlocks. Do not apply AC power to the unit (or any of its assemblies) unless all solid-state heat sinks are correctly installed.

8. Always connect a test instrument's ground lead to the instrument chassis ground *before* connecting the positive lead; always remove the instrument's ground lead last.

1-3 Precautions for Electrostatically Sensitive Devices (ESDs)

1. Some semiconductor ("solid state") devices are easily damaged by static electricity. Such components are called Electrostatically Sensitive Devices (ESDs). Examples include integrated circuits and some field-effect transistors. The following techniques will reduce the occurrence of component damage caused by static electricity.

2. Immediately before handling any semiconductor components or assemblies, drain the electrostatic charge from your body by touching a known earth ground. Alternatively, wear a discharging wrist-strap device. (Be sure to remove it prior to applying power--this is an electric shock precaution.)

3. After removing an ESD-equipped assembly, place it on a conductive surface such as aluminum foil to prevent accumulation of electrostatic charge.

4. Do not use freon-propelled chemicals. These can generate electrical charges that damage ESDs.

5. Use only a grounded-tip soldering iron when soldering or unsoldering ESDs.

6. Use only an anti-static solder removal device. Many solder removal devices are not rated as "anti-static" (these can accumulate sufficient electrical charge to damage ESDs).

7. Do not remove a replacement ESD from its protective package until you are ready to install it. Most replacement ESDs are packaged with leads that are electrically shorted together by conductive foam, aluminum foil or other conductive materials.

8. Immediately before removing the protective material from the leads of a replacement ESD, touch the protective material to the chassis or circuit assembly into which the device will be installed.

9. Minimize body motions when handing unpackaged replacement ESDs. Motions such as brushing clothes together, or lifting a foot from a carpeted floor can generate enough static electricity to damage an ESD.

1-4 Special Precautions and Warning Labels for Laser Products

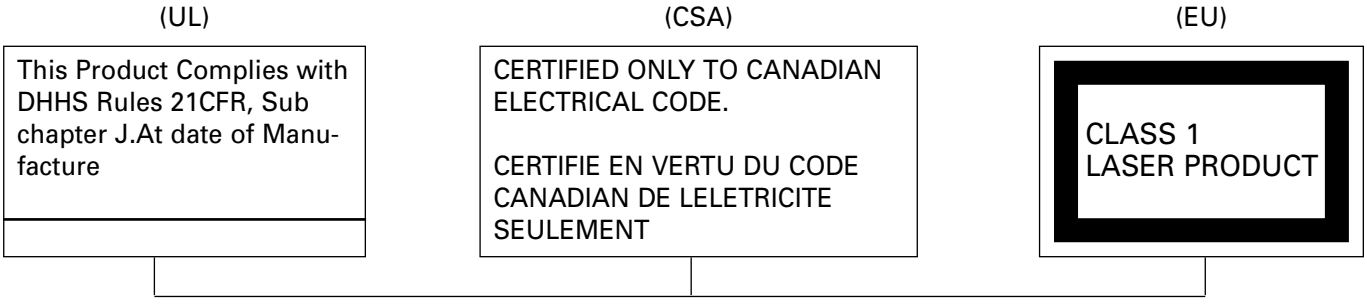

(UL)
This Product Complies with DHHS Rules 21CFR, Sub chapter J.At date of Manu-facture
(CSA)
CERTIFIED ONLY TO CANADIAN ELECTRICAL CODE.
CERTIFIE EN VERTU DU CODE CANADIAN DE LELETRICITE SEULEMENT
(EU)
CLASS 1
LASER PRODUCT

Fig. 1-3 Warning Labels (Location: Enclosure Block)

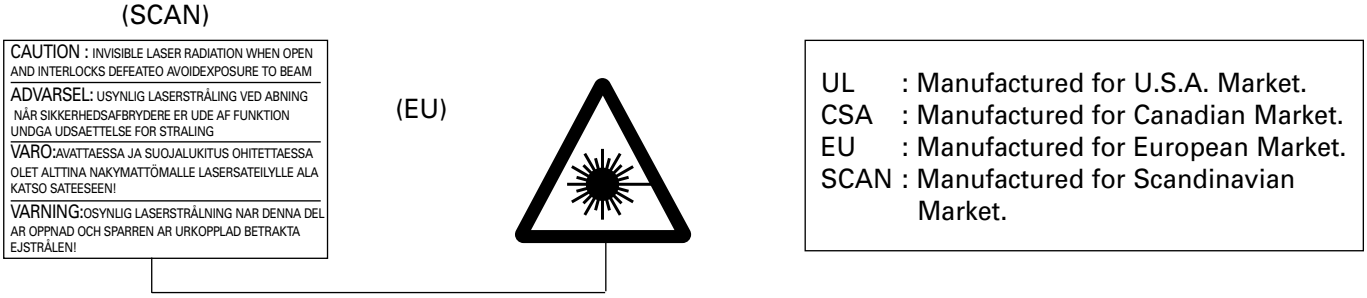

(SCAN)
CAUTION : INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCKS DEFEATEO AVOIDEXPOSURE TO BEAM
ADVARSEL: USYNLIG LASERSTRÅLING VED ABNING NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION UNDGA UDSAETTELSE FOR STRALING
VARO:AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTINA NAKYMATTÖMALLE LASERSATEILYLLE ALA KATSO SATEESEEN!
VARNING:OSYNLIG LASERSTRÅLNING NAR DENNA DEL AR OPPNAD OCH SPARREN AR URKOPPLAD BETRAKTA EJSTRÅLEN!
(EU)
UL : Manufactured for U.S.A. Market.
CSA : Manufactured for Canadian Market.
EU : Manufactured for European Market.
SCAN : Manufactured for Scandinavian Market.

Fig. 1-4 Warning Labels (Location: Disc Clamper, Inner Side of Unit Door or Nearby Unit Chassis)

1-4 Special Precautions and Warning Labels for Laser Products (Continued)

1-4-1 Warnings

1. When servicing, do not approach the LASER exit with the eye too closely. In case it is necessary to confirm LASER beam emission, be sure to observe from a distance of more than 30 cm from the surface of the objective lens on the optical pick-up block.

2. Do not attempt to handle the objective lens when the DISC is not on the tray.

1-4-2 Laser Diode Specifications

Material: GaAs+ GaAlAs
Wavelength: 760-800 nm
Emission Duration: Continuous

Laser Output: 0.2 mw (measured at a 1.6 mm distance from the objective lens surface on the optical pick-up block.)

1-4-3 Handling the Optical Pick-up

1. Static electricity from clothing or the body may cause electrostatic breakdown of the laser diode in the Optical Pickup. Follow this procedure:

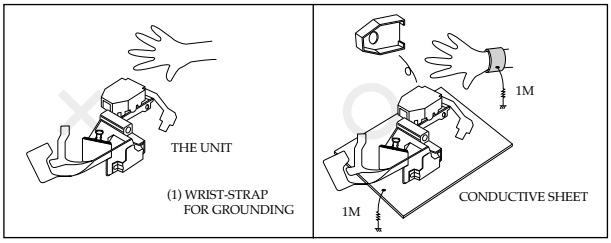
2. Place a conductive sheet on the work bench (i.e., the black sheet used for wrapping repair parts.) Note: The surface of the work bench should be covered by a copper ground plane, which is grounded.

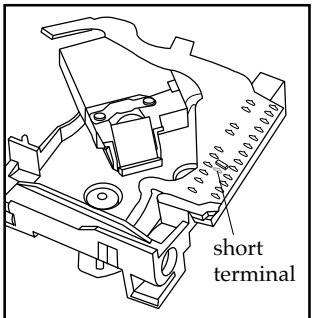
3. The repair technician must wear a wrist strap which is grounded to the copper sheet.

4. To remove the Optical Pickup block: Place the set on the conductive sheet, and momentarily touch the conductive sheet with both hands. (While working, do not allow any electrostatic sources--such as clothes--to touch the unit.)

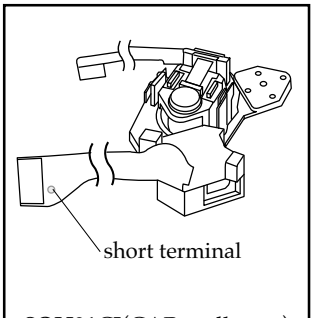
5. Ground the "Short Terminal" (located on the PCB, inside the Pickup Assembly) before replacing the Pickup. This terminal should be shorted whenever the Pickup Assembly is lifted or moved.

6. After replacing the Pickup, reopen the Short Terminal. See diagrams below:

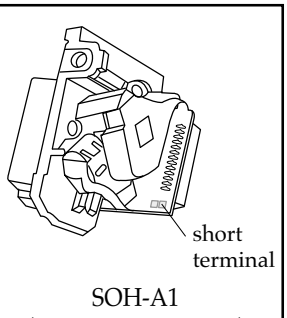




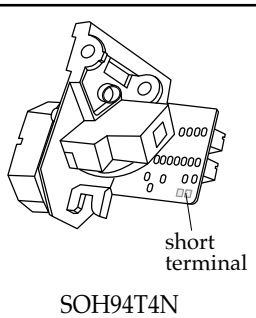
SOH91VI(LDP)



SOH91CI(CAR,walkman)



SOH-A1
(CMS-V10,CMS-V30)



SOH94T4N
(CMS-V10,CMS-V30)

2. Specifications

General		Power source Power consumption Dimmensions(mm)	220V 280W 270(W)x317(H)x333(D)
Amp		Power output Total harmonic distortion Frequency range Signal to noise ratio Channel separation Input sensitivity	90W/CH(6Ω) 10% 20Hz ~ 20kHz 75 dB 50 dB (1 KHz) AUX 400mV
Tuner	FM	Frequency range Usable sensitivity Signal to noise ratio If rejection ratio Total harmonic distortion Separation(Stereo)	87.5 ~ 108MHz 1μV 62dB 60dB 0.45% 35dB
	AM	Frequency range Usable sensitivity Signal to noise ratio If rejection ratio Total harmonic distortion	522 ~ 1611KHz 600μV 40dB 30dB 2%
	LW (Option)	Frequency range Usable sensitivity Signal to noise ratio	146 ~ 290KHz 1000μV 35dB
Cassette Deck		Frequency range WOW FLUTTER Erasing effect Signal to noise ratio Total harmonic distortion	125Hz ~ 12.5KHz 0.15% 60dB 40dB 2.5%
Compact Disc		Frequency response Signal to noise ratio Channel separation Total harmonic distortion	20Hz ~ 20KHz(¡ 1dB) 100dB(1kHz 0dB) 80dB(1kHz 0dB) 0.01%(1kHz 0dB)

* Specifications are subject to change without notice.

3. Disassembly and Reassembly

*** Before removing the unit, be sure to unplug.**

3-1 Amp and Tuner Section

3-1-1 Cabinet-Top

1. Remove 9 screws ① holding the Cabinet-Top.
2. Remove the Cabinet-Top in the direction of arrow.

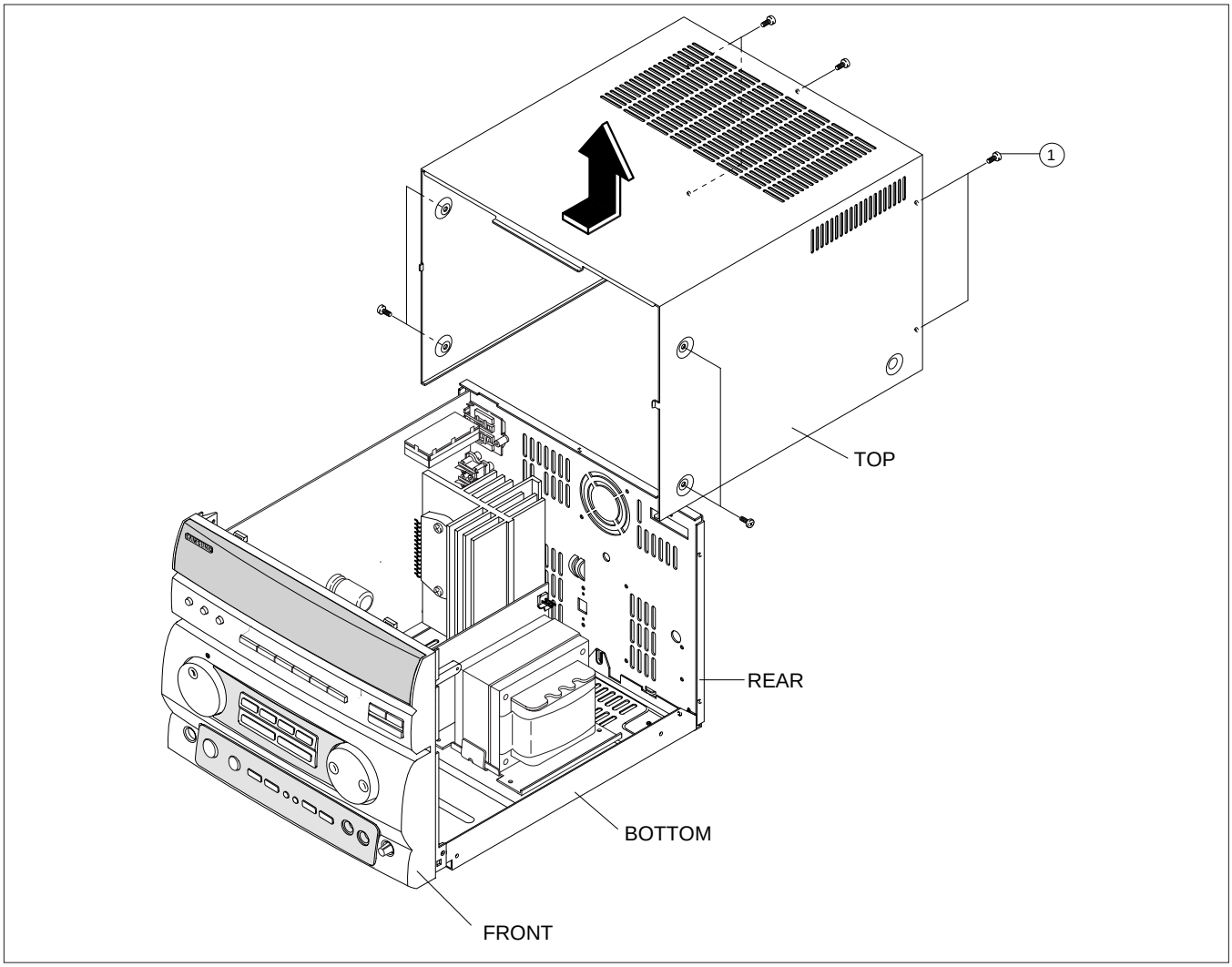


Figure 3-1

3-1-2 Cabinet-Rear

1. Remove 7 screws ① holding the Cabinet-Rear.
2. Remove the Cabinet-Rear in the direction of arrow.
3. Remove the Main PCB in the direction of arrow.

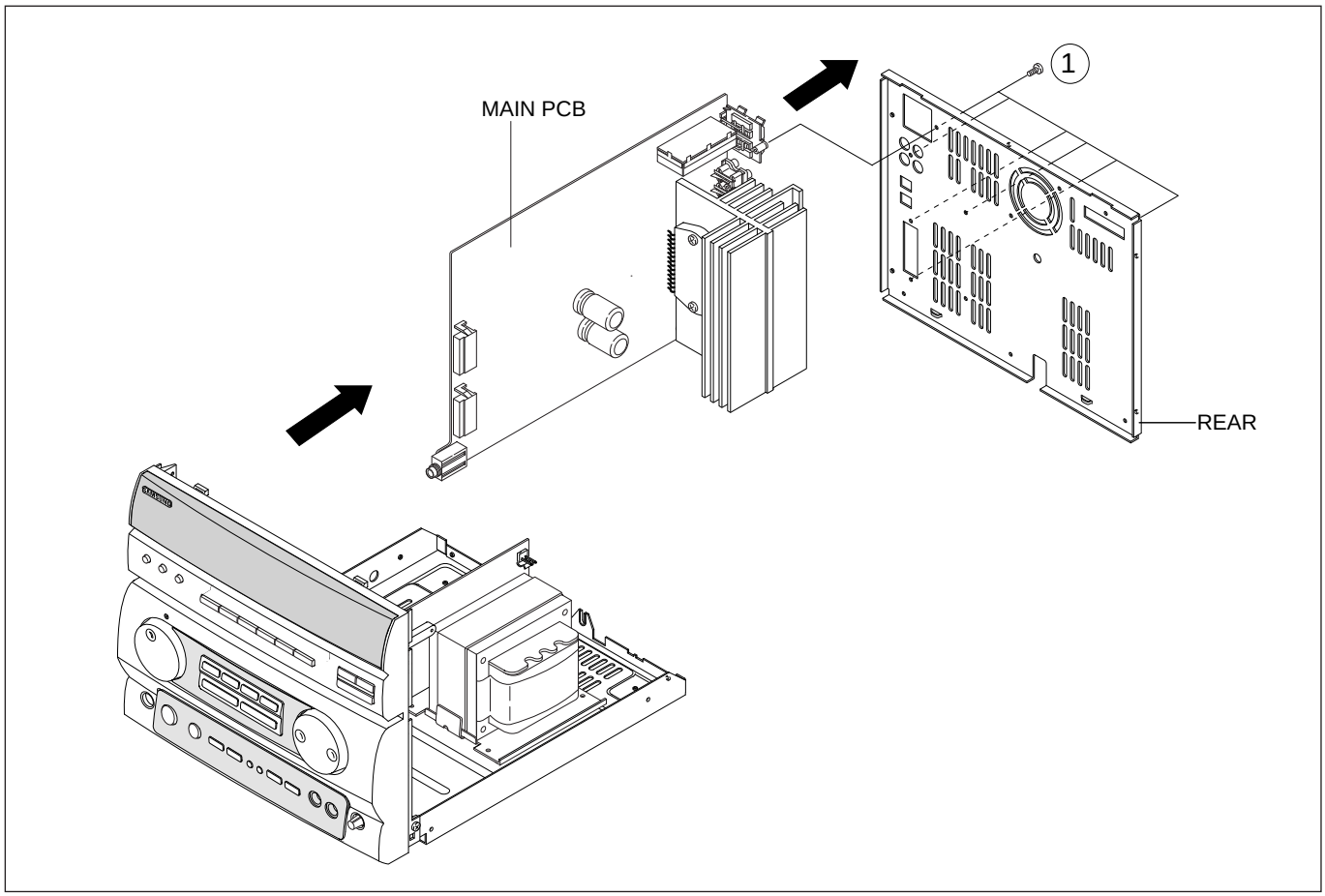


Figure 3-2

3-1-3 Cabinet-Front

1. Remove 3 screws ① holding the Cabinet-Front.
2. Remove the Cabinet-Front from the Bottom.

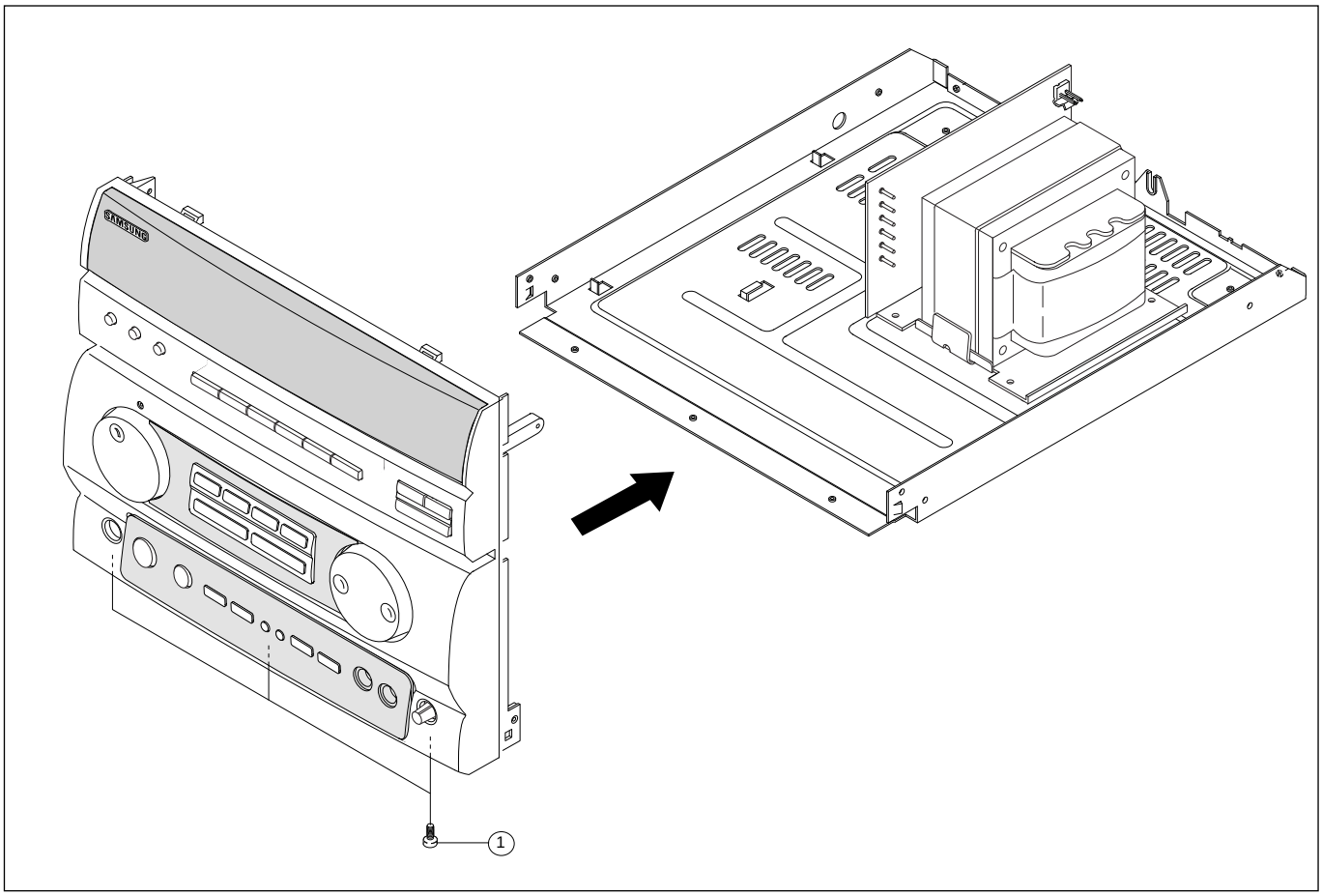


Figure 3-3

3-2 Cassette Deck and CD Section

3-2-1 Cabinet-Top

1. Remove 9 screws ① holding the Cabinet-Top.
2. Remove the Cabinet-Top in the direction of arrow.

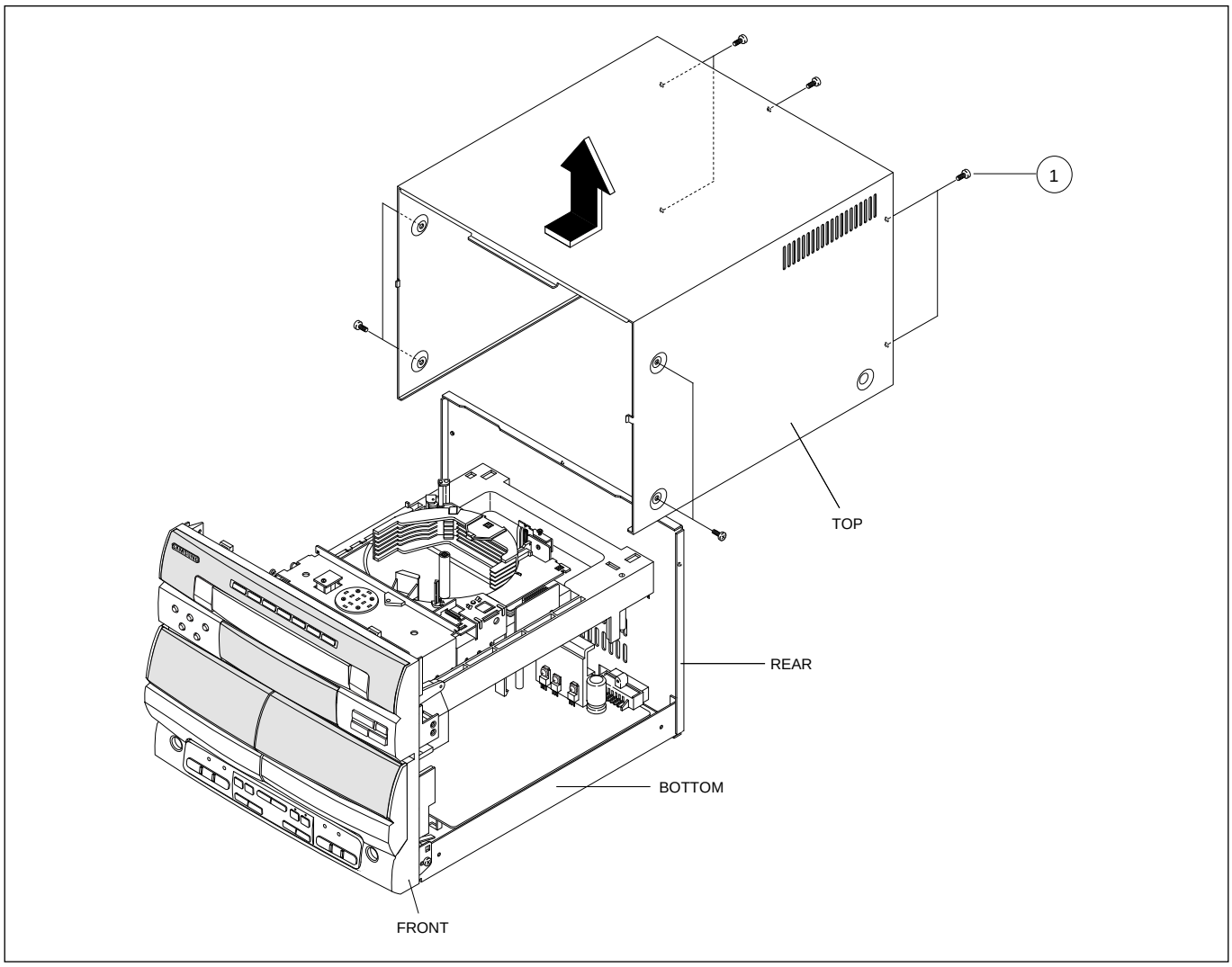
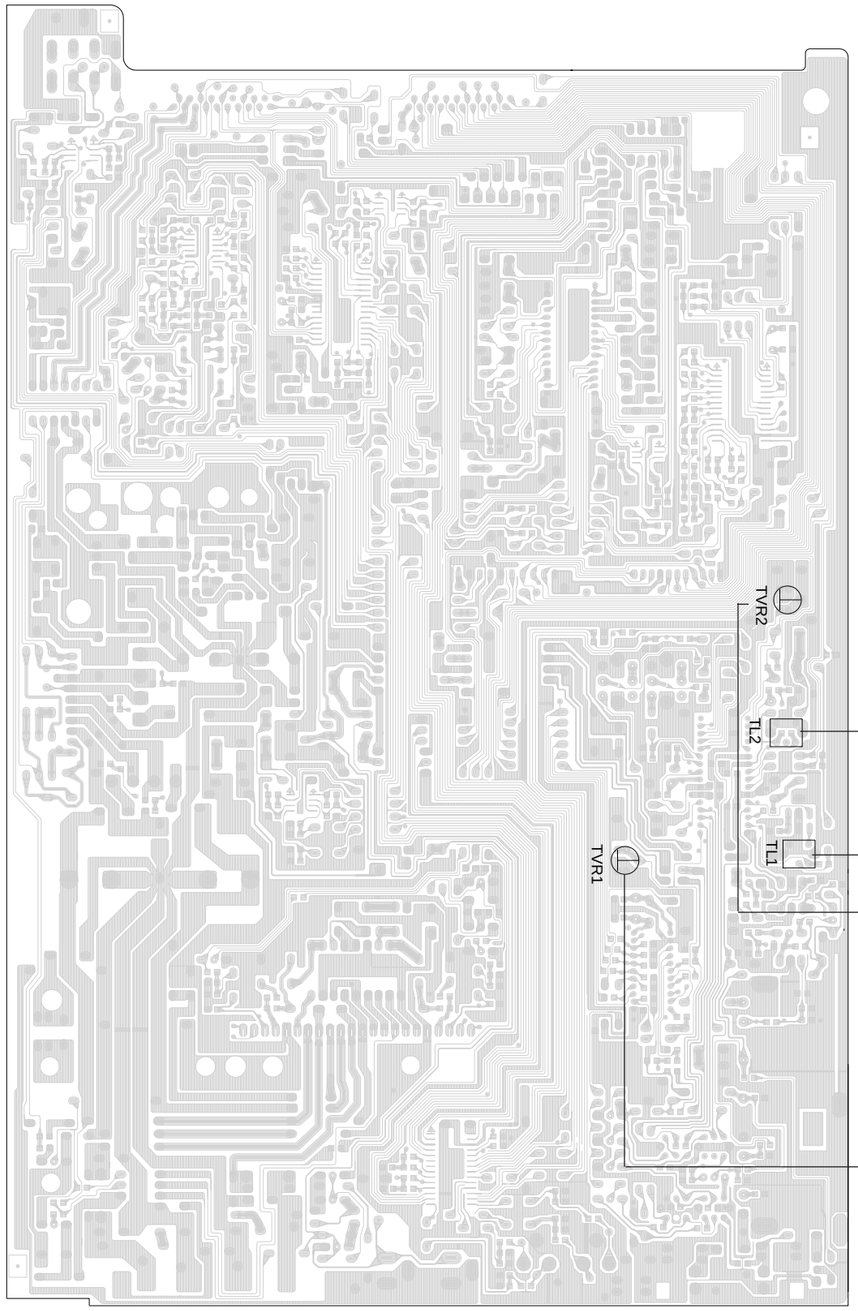


Figure 3-4

4-1 Tuner Section



* Note : Be sure to adjust the AM for Tuner Search Level.
(If AM is adjusted, FM is adjusted automatically.)

FM T.H.D Adjustment	
SSG FREQ.	98MHz
Adjustment point (TL2)	FM DETECTIR COIL
Minimum output(Figure4-1)	

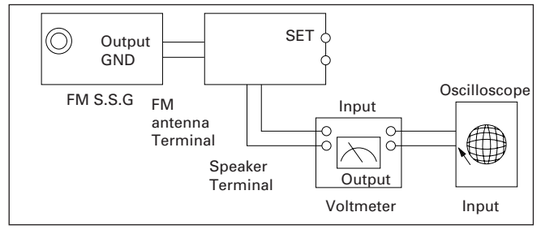


Figure 4-1 IF CENTER and T.H.D Adjustment

AM IF Adjustment	
SSG FREQ.	594KHz
Adjustment point (TL1)	AM IF COIL
Level : Maximum (Figure4-2)	

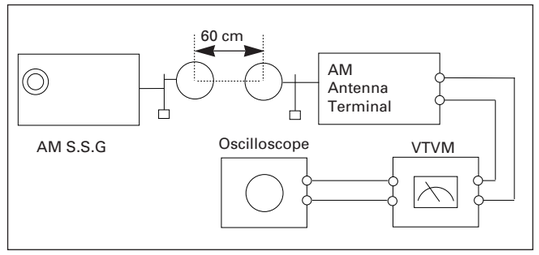


Figure 4-2 AM IF Level Adjustment

AM Search Level Adjustment	
SSG FREQ.	999KHz
Adjustment point (TL1)	SEMI-VR (20KB)
"TUNED" is shown of FLT (Figure4-3)	

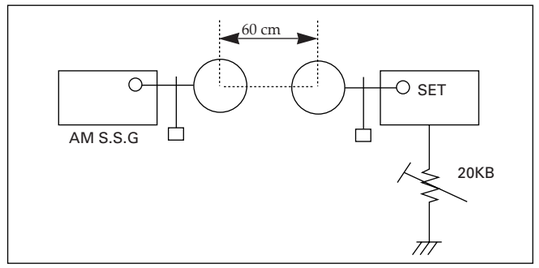


Figure 4-3 AM Search Level Adjustment

FM Search Level Adjustment	
SSG FREQ.	98MHz
Adjustment point (TL1)	SEMI-VR (5KB)
"TUNED" is shown of FLT (Figure4-4)	

* Note : Adjust FM S.S.G Level to
EMF 21dB (Included Loss)

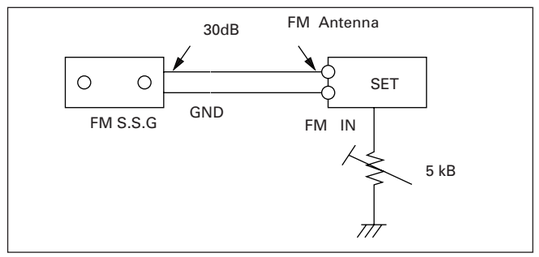
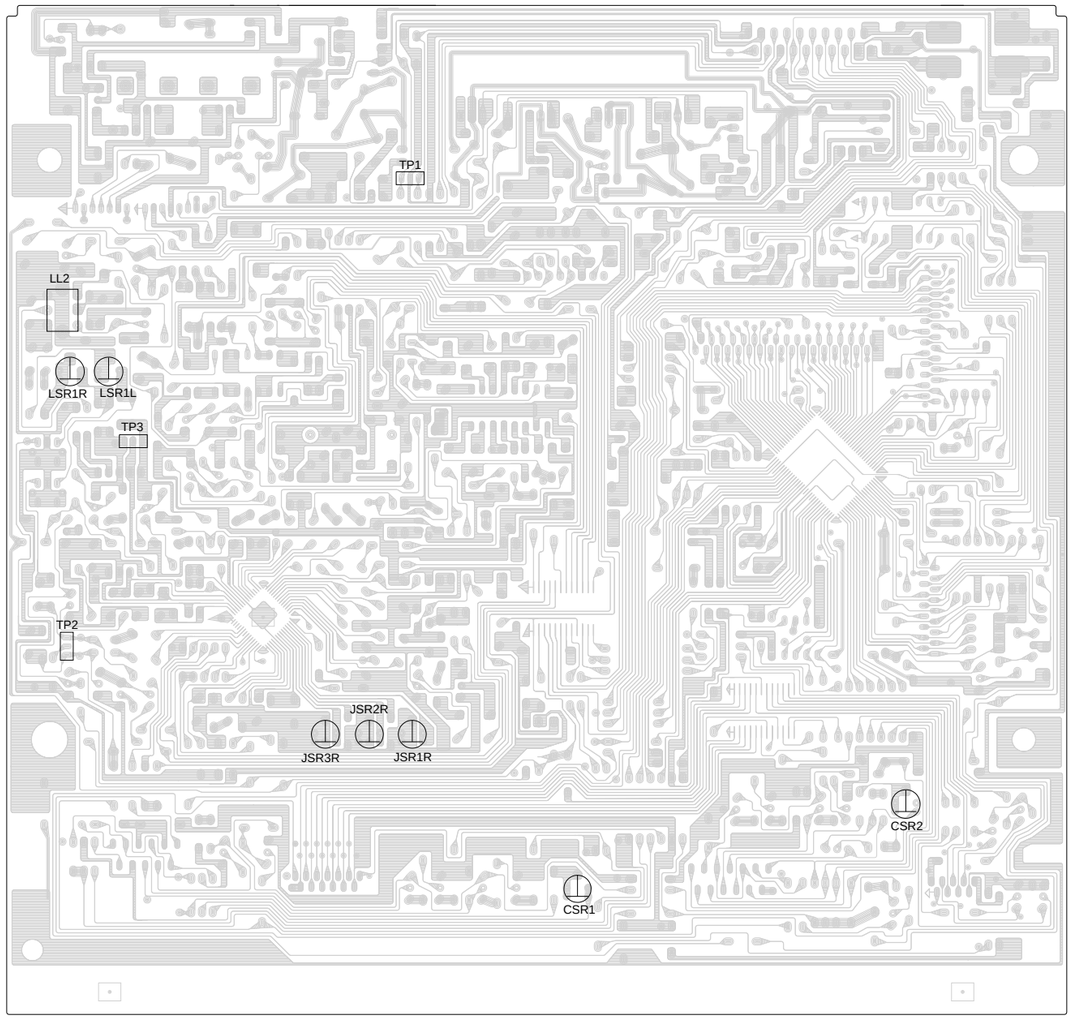


Figure 4-4 FM Search Level Adjustment

4-2 Cassette Deck Section



4-2-1 To Adjust Tape Speed

Note

1) Measuring Tape i) MTT-111(or equivalent)
(Tapes recorded with 3kHz)
ii) MTT-5512(or equivalent)
2) Connect the Cassette Deck to the frequency counter as in Figure 4-5

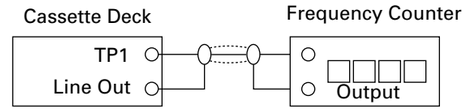


Figure 4-5

Step	Item	Pre-Setup Condition	Pre-Setup	To Adjust	Standard	Remark
1	NOR SPEED Control counter	OUT (connected tothe frequency counter)	1) A-Deck: MTT-111 2) Press PLAY SW button 3) B-Deck: Same as below	Turn CSR1,2 to left and right.	3KHZ ± 1%	
2	HI SPEED Control	Same as above	1) A-Deck: MTT-111 2) B-Deck: MTT-5512 3) Press Hi Speed dubbing switch	Fixed	5700~6300KHz	Check

4-2-2 To Adjust Replay Head

NOTES

1) Before the actual adjustment, clean the replay/recording head.
2) Measuring tape :
   i) MTT-114NA (or equivalent 12.5 kHz AZIMUTH control).
   ii) MTT-150 (or equivalent : Dolby level 200mwb/m)
3) Dolby NR SW OFF
4) The cassette deck is connections as shown in figure4-6.

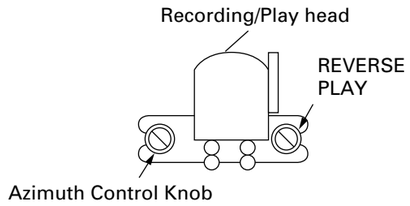


Figure 4-6

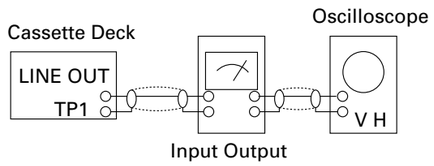


Figure 4-7

1) Adjust 1-Deck Replay Level

Step	Item	Pre-Setup Condition	Pre-Setup	To Adjust	Standard	Remark
1	AZIMUTH	TP1 OUT (VTVM is connected to the scope)	After putting MTT -114NA into Deck 1. 1) Press FWD PLAY button. 2) Press REV PLAY button.	1) Turn the control knob to as shown in Figure 4-6. 2) Adjust the right control screw to playback Rev. Mode.	Max output and same phase (both channels).	After adjustment secure it with REGION LOCK.
2	PlayBack out Level	Same as above	PLAY MTT-150 on Deck1.	L-CH : Turn JSR1R to the right and left R-CH : Fixed	300mV ±0.5dB	See the diagram for adjustment locations

2) Adjust 2-Deck Replay Level

Step	Item	Pre-Setup Condition	Pre-Setup	To Adjust	Standard	Remark
1	AZIMUTH	TP3 OUT (VTVM is connected to the scope)	After putting MTT-114NA into Deck 2. 1) Press FWD PLAY button. 2) Press REV PLAY button.	1) Turn the control knob to left and right as shown in the Figure 4-6. 2) Adjust the right control screw to playback Rev. Mode.	Max output and same phase both channels.	After adjustment secure it with REGION LOCK.
2	PlayBack out Level	Same as above	PLAY MTT-150 on Deck2.	L-CH : Turn JSR2R to the right and left; R-CH : Fixed	300mV ±0.5dB	See the diagram for adjustment locations

4-2-3 To Adjust PlayBack

NOTES

1) Connect the measuring instruments as shown in Figure 4-8
2) Set the DOLBY NR Switch off.
3) Measuring tape :
   MTT-5512 (or equivalent : normal recording)
4) The input signals supply 400Hz 400mV into AUX IN of AMP (AUDIO OSC).

Step	Item	Pre-Setup Condition	Pre-Setup	To Adjust	Standard	Remark
1	Normal electric current for recording	Connect to TP2 as in Figure 4-8 and read VTVM	Insert MTT-5512 into Deck 2, then press REC button.	L-CH : DSR2L to the right and left. R-CH : Fixed	VTVM 400mV ±5%	See diagram for adjustment locations.
2	BIAS OSC. FREQUENCY	Connect the frequency counter to TP1	Insert MTT-5512 into Deck 2, then press REC button.	Turn BIAS oscillator frequency coil (LL2) to the right and left.	105KHz ±5%	See diagram for adjustment locations.
3	BIAS electric current	Connect to TP1 as in Figure 4-8 and read the VTVM	Insert MTT-5512 into Deck 2, then press REC button.	L-CH : DSR1L and R-CH: DSR1R to the right and left.	VTVM (7V ±5%)	See diagram for adjustment locations.

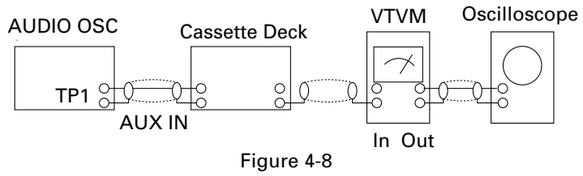
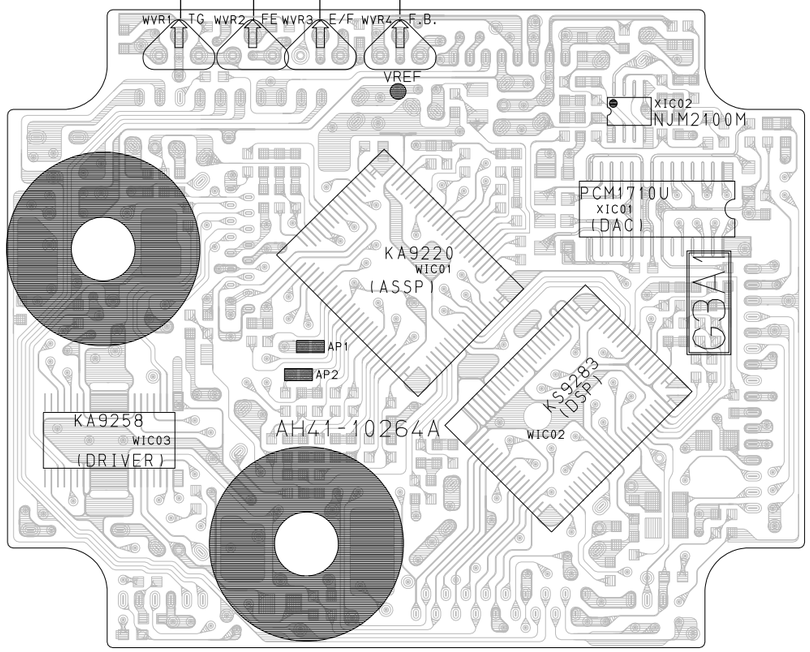


Figure 4-8

4-3 CD Section

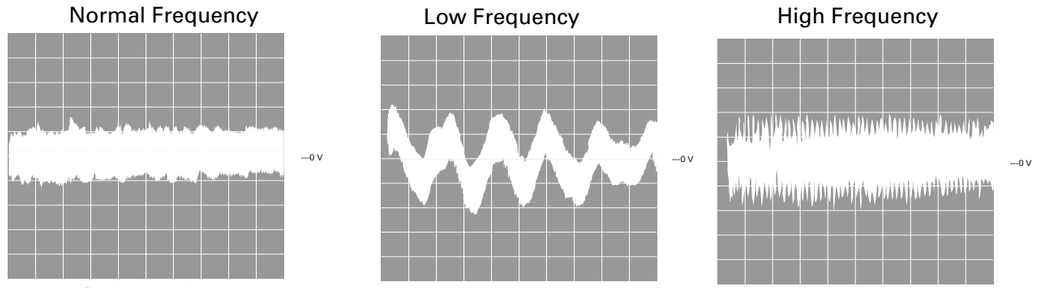


4-3-1 To Adjust FOCUS BIAS(STOP mode)

1. Set Volt/Div of the oscilloscope to DC 100mV.
2. Ground the scope input and set the waveform to 0V, DC range.
3. Connect the GND terminal of the oscilloscope to Vref, and (+) terminal to center of TP1.
4. Set WVR4 to 0mV.

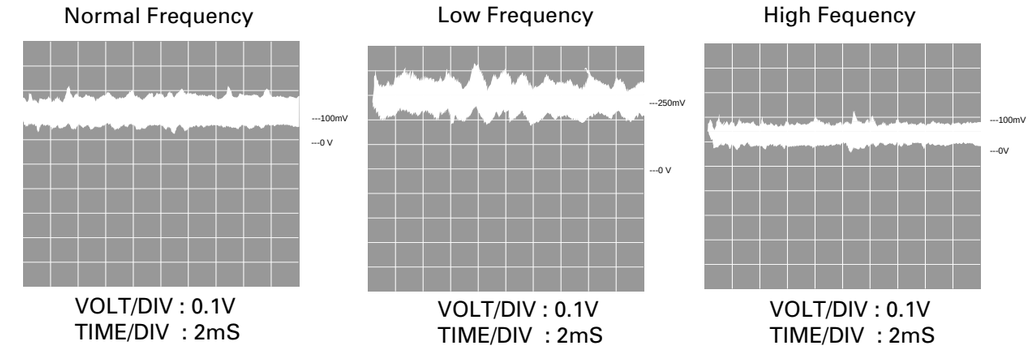
4-3-2 To Adjust Tracking Gain (PLAY mode)

1. Connect the GND terminal of the oscilloscope to Vref and (+) terminal to AP2.
2. Load and play the disc
3. While the disc is running adjust the gain with WVR1 as shown below.



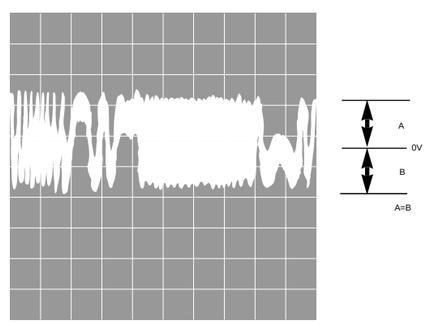
4-3-3 To Adjust Focus Gain (PLAY mode)

1. Connect the GND terminal of the oscilloscope to Vref and (+) terminal to TP1.
2. Load and play the disc
3. While the disc is running adjust the gain with NVR1703 as shown in the following figure.



4-3-4 To Adjust E/F Balance (PLAY mode)

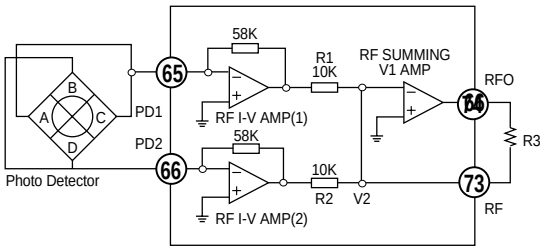
1. Set TIME/DIV of the oscilloscope to 2mS.
2. Set Volt/DIV of the oscilloscope to 0.5V.
3. Ground the scope input and set to DC and then set the DC range.
4. Connect the GND terminal of the oscilloscope to Vref and (+) terminal to center to AP2.
5. Load and play the disc.
6. Turn WVR1 counterclockwise to the minimum value.
7. Raise WVR3 and adjust the waveform so that its middle comes to GND of the oscilloscope (or until the upper half of waveform becomes symmetrical to the bottom half, A=B)
8. Adjust WVR1 (arrow) for normal sound.



5. Special Circuit Descriptions

5-1 CD

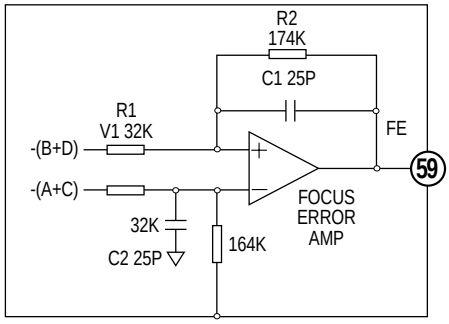
5-1-1 RF Amp (KA9220) : WIC01



RF I-V Amp(1) and RF I-V Amp(2) are converted to voltage via internal resistance of 58kΩ from the current of PD1(A+C) and PD2(B+D): This voltage is added to RF summing amplifier.
The signal (A+B+C+D) is applied to RFO (No. 66 terminal).
RF output voltage is calculated as follows :

$$V_{RF} = -R3 \times (iPD1 + iPD2)$$
$$= -R3 \times (V_1/R_1 + V_2/R_2)$$
$$= -R3 \times \left(\frac{V_1}{10K} + \frac{V_2}{10K}\right)$$
$$= -\frac{R3}{10K} \times (V_1 + V_2)$$

5-1-2 FOCUS ERROR Amp(KA9220) : WIC01



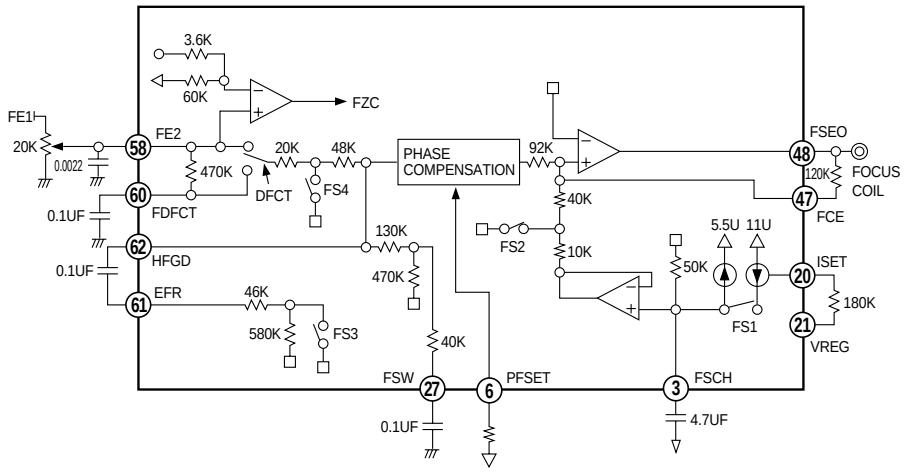
FOCUS ERROR Amp is the circuit which amplifies the difference between RF I-V Amp(1) output (A+C) and RF I-V Amp(2) output(B+D).
These two signals are supplied to (-) and (+) input terminals of FOCUS ERROR Amp. The FOCUS ERROR signal resulting from this difference voltage is applied to FE (Terminal No.57).
The FE output voltage of this low frequency component varies according to {(A+C) - (B+D)}.
VFE is calculated as follows :

$V_{FE} = (R2/R1) \times (V2-V1) = 5.4(V2-V1)$

This FOCUS ERROR voltage is sent to FOCUS SERVO .

5-1-3 FOCUS SERVO SYSTEM (KA9220) : WIC01

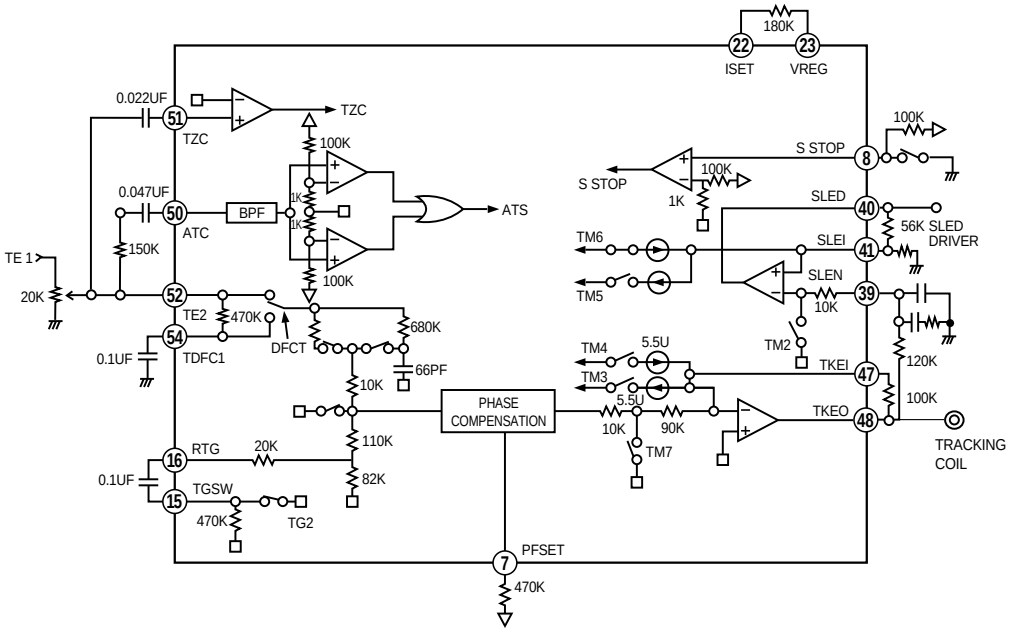
When FS3 is ON, high frequency gain decreases (time constant set by pin17, pin19, and capacitor connected to internal resistance).
The capacitor between pin 18 and GND sets the time constant to pass the low frequency operated in PLAY mode.



The maximum frequency of focus phase compensation is inversely proportional to the resistance connected to pin 7. Focus search peak is about 1.1 Vp-p, and is inversely proportional to the resistance connected to pins 22,23 (if this resistance changes, the peak of track jump and sled kick change).
The inversion input of FZC comparator is set to 5.7% of the difference between Vcc and VC(pin69) {{5.7% x (Vcc-Vc)}.
Note : If the resistance connected to pin7 changes, the phase compensation peak of focus, tracking, sled servo changes. At the same time, 'op-amp' dynamic range and offset voltage also change.

5-1-4 Tracking Sled Servo System (KA9220) : WIC01

The capactor between pin 15 and 16 attenuates the high frequency when TG2 is off. The maximum frequency of tracking phase compensation is inversely proportional to the resistance connected to pin 7 (about 1.2kHz at 470k). The tracking jump (FWD and REV) is decided when TM3 and TM4 are ON, and the peak voltage induced from tracing coil is decided by the both TM3 and TM4 current values and feed back resistance of pin 47.
Track jump max voltage = TM3 (TM4) current x feedback resistance.



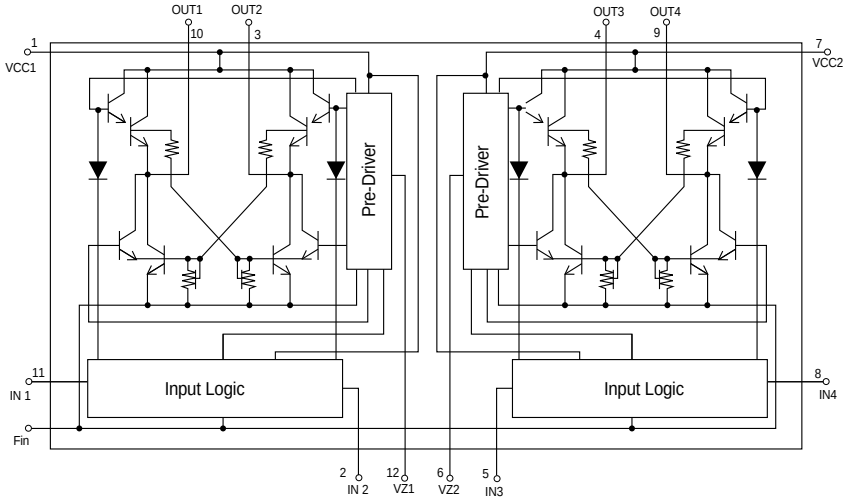
FWD or REV sled kick occnrs when TM5 or TM6 is ON, and the peak voltage added to sled motor is decided by TM5 or TM6 current and the feedback resistance of pin 41.
Sled jump max. voltage = TM5(TM6) current x feedback resistance
Each SW current is decided by the resistance connected to pin 22 and 23.
When the resistance is about 150Ω,

TM3 or TM4 = 11μA,

TM5 or TM6 = 22μA,

This current is inversely proportional to the resistor, variable within a range of t 5 to 40 μA for TM3.
STOP is the ON/OFF detection signal for the limit SW (or the sled motor's innermost cirumference).

5-1-5 Motor Drive(LB1649) : UIC4



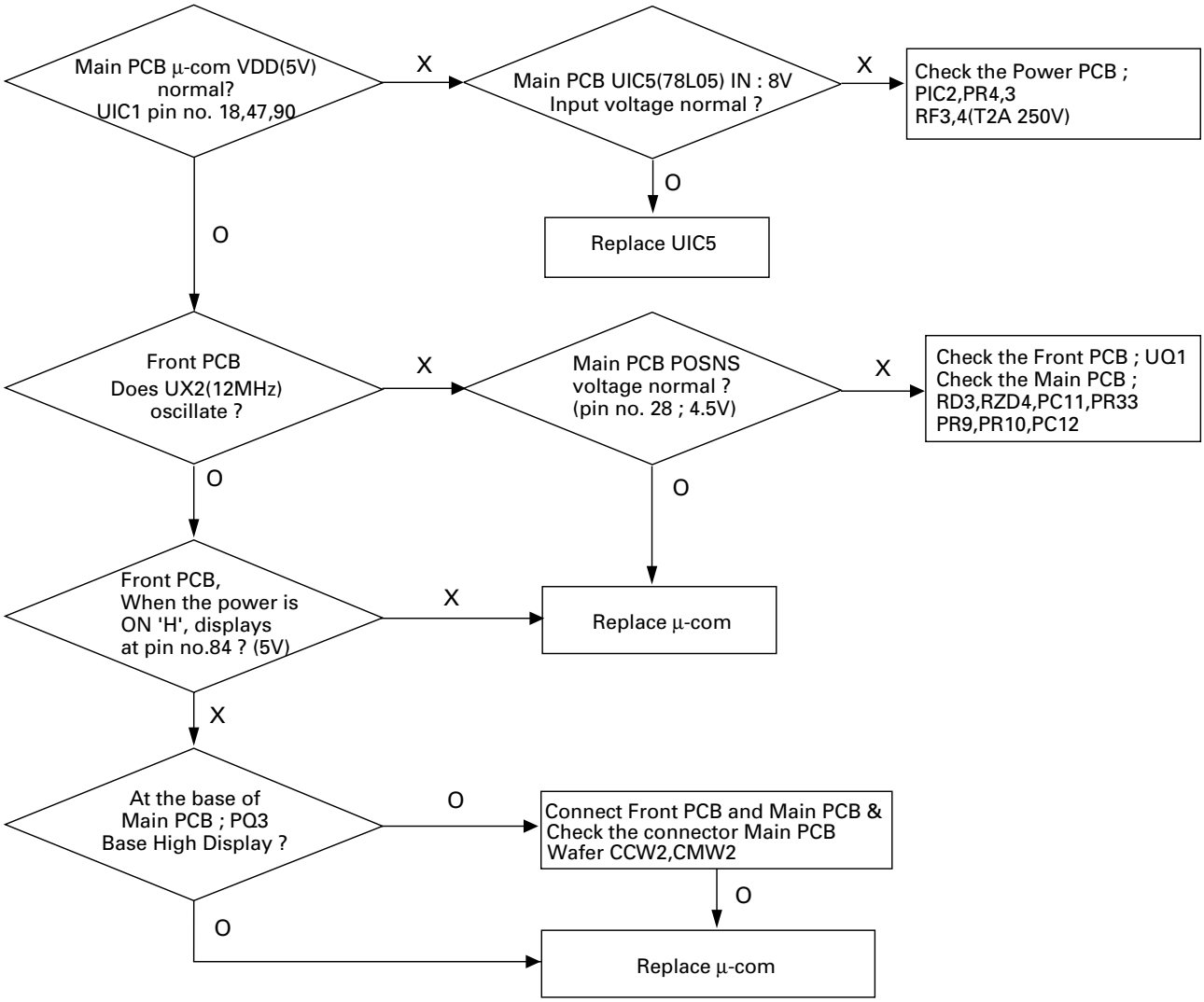
IN 1	2	OUT1	OUT2
0	0	L	L
1	0	H	L
0	1	L	H
1	1	L	L

IN 3	IN 4	OUT3	OUT4
0	0	L	L
1	0	H	L
0	1	L	H
1	1	L	L

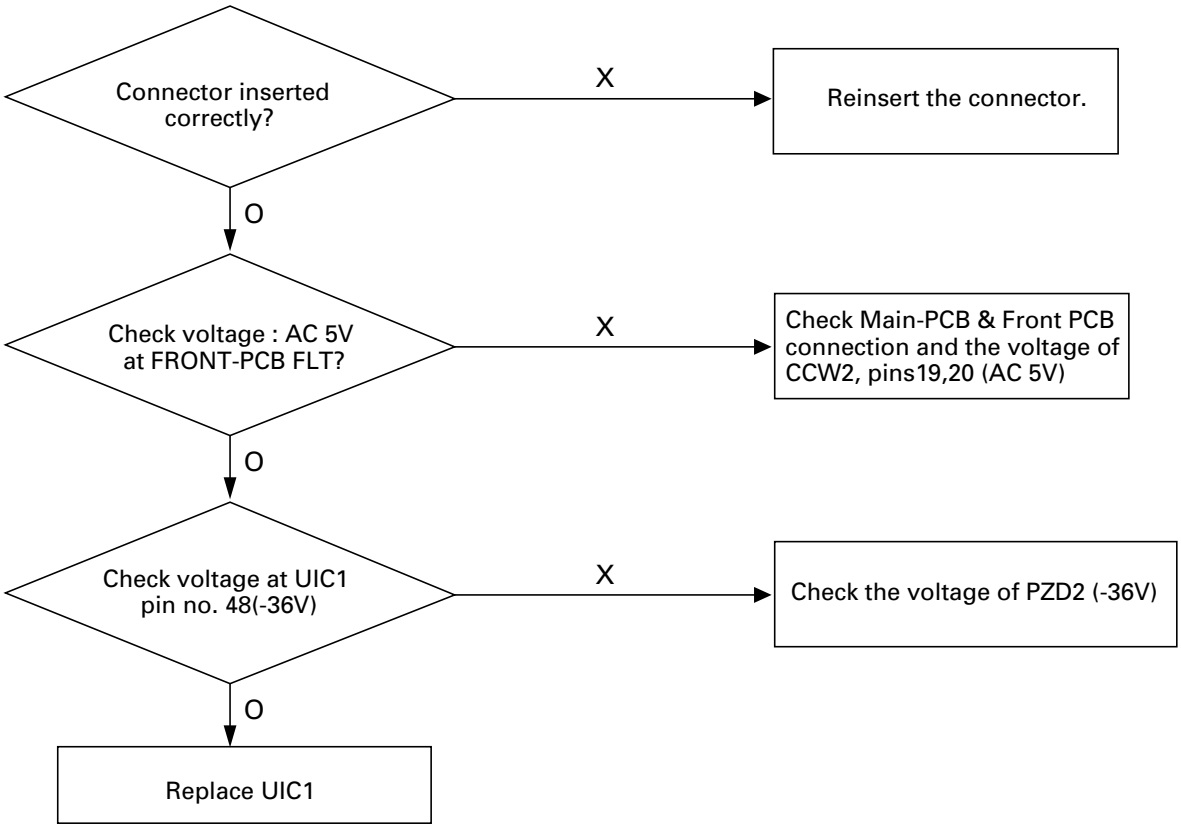
6. Troubleshooting

6-1 The Amp Section

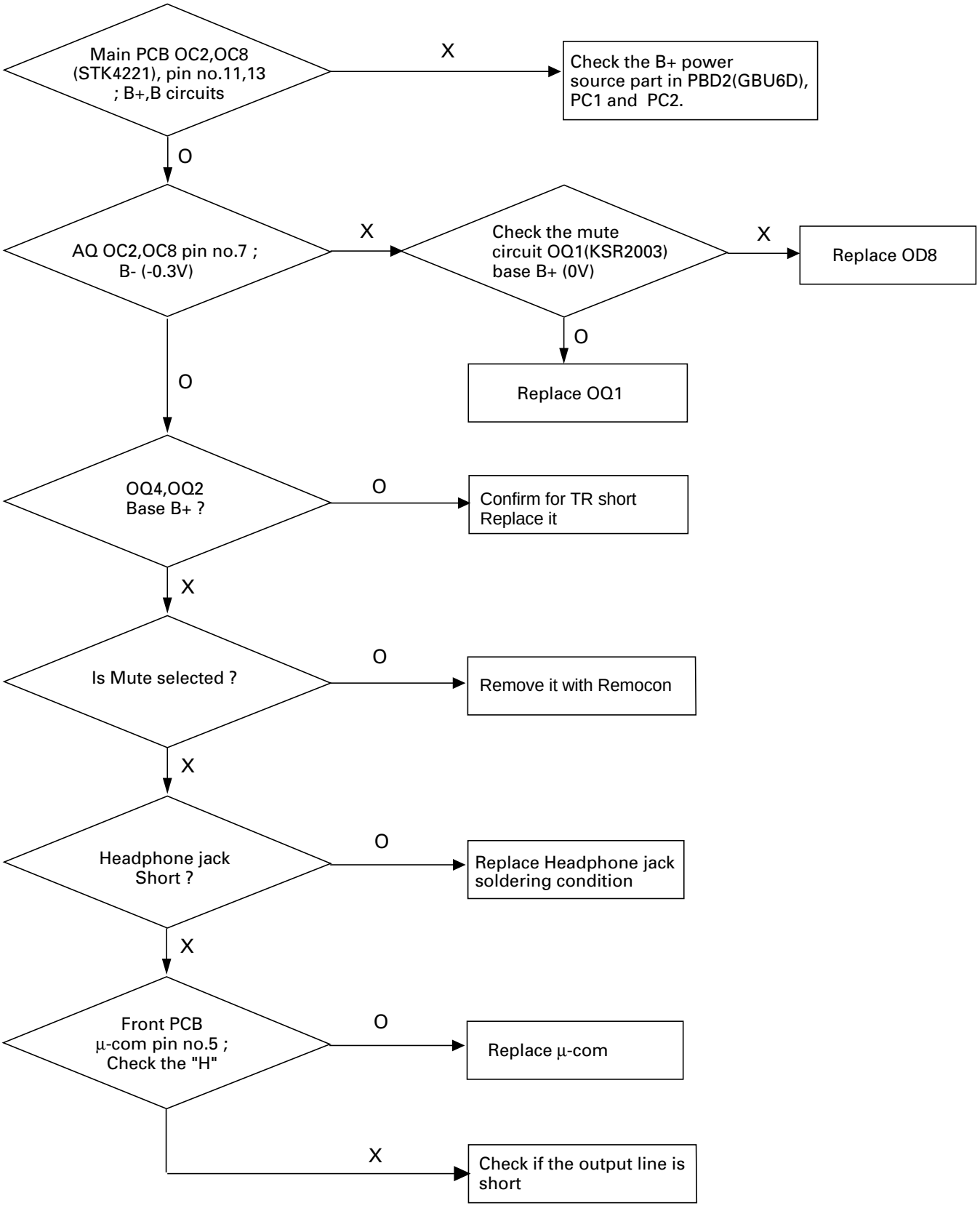
6-1-1 Power Malfunction


Main PCB μ-com VDD(5V) normal? UIC1 pin no. 18,47,90
X
Main PCB UIC5(78L05) IN : 8V Input voltage normal ?
X
Check the Power PCB ; PIC2,PR4,3 RF3,4(T2A 250V)
O
Replace UIC5
O
Front PCB Does UX2(12MHz) oscillate ?
X
Main PCB POSNS voltage normal ? (pin no. 28 ; 4.5V)
X
Check the Front PCB ; UQ1 Check the Main PCB ; RD3,RZD4,PC11,PR33 PR9,PR10,PC12
O
O
Front PCB, When the power is ON 'H', displays at pin no.84 ? (5V)
X
Replace μ-com
X
At the base of Main PCB ; PQ3 Base High Display ?
O
Connect Front PCB and Main PCB & Check the connector Main PCB Wafer CCW2,CMW2
O
O
Replace μ-com

6-1-2 F.L.T Malfunction

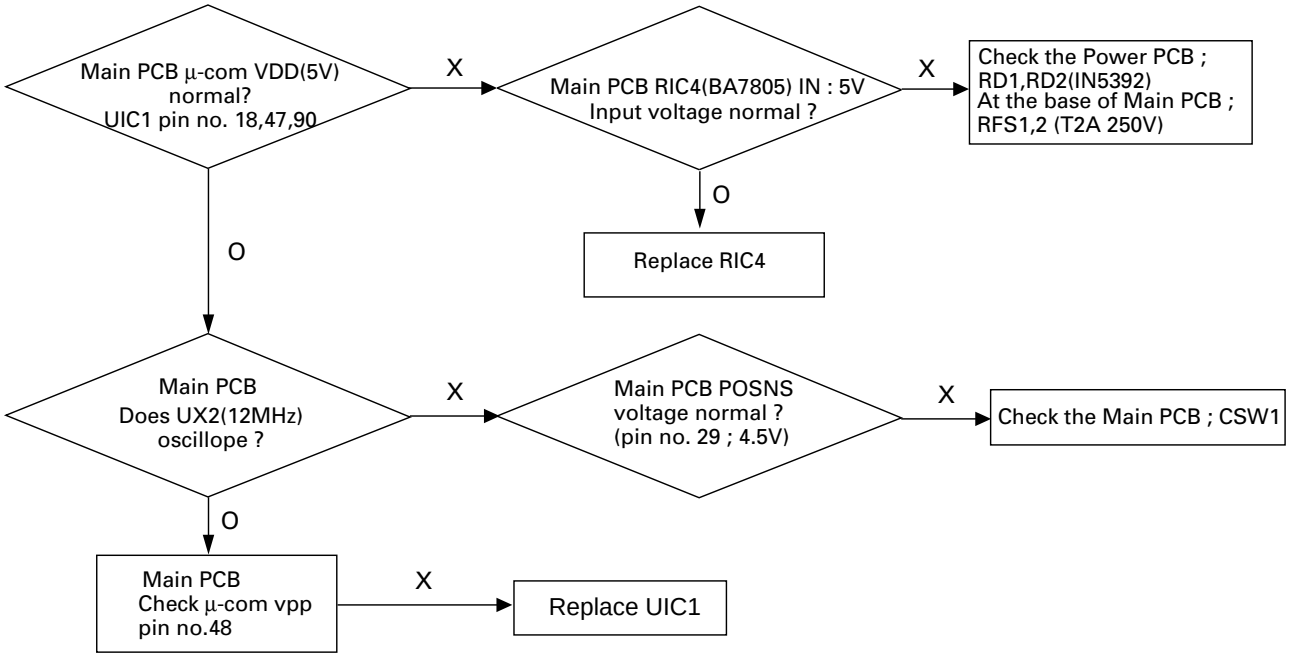


6-1-3 No Output

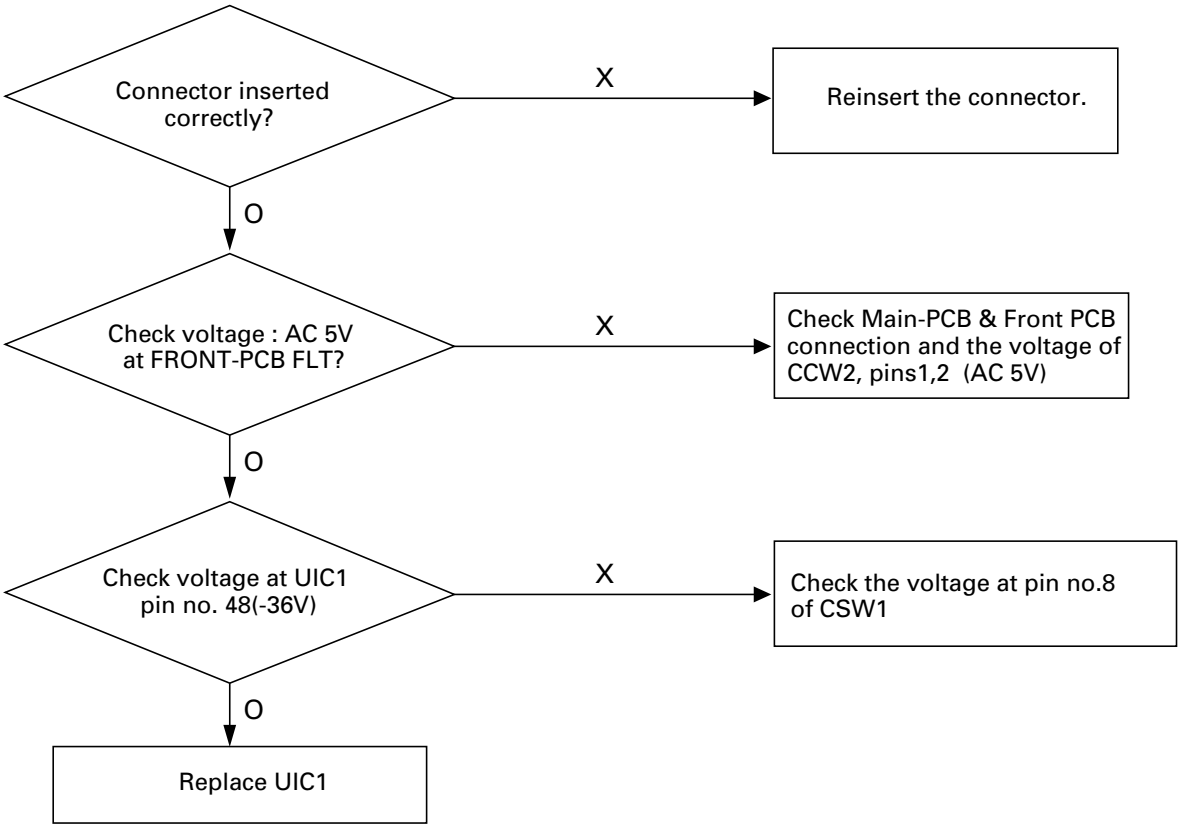


6-2 The Deck Section

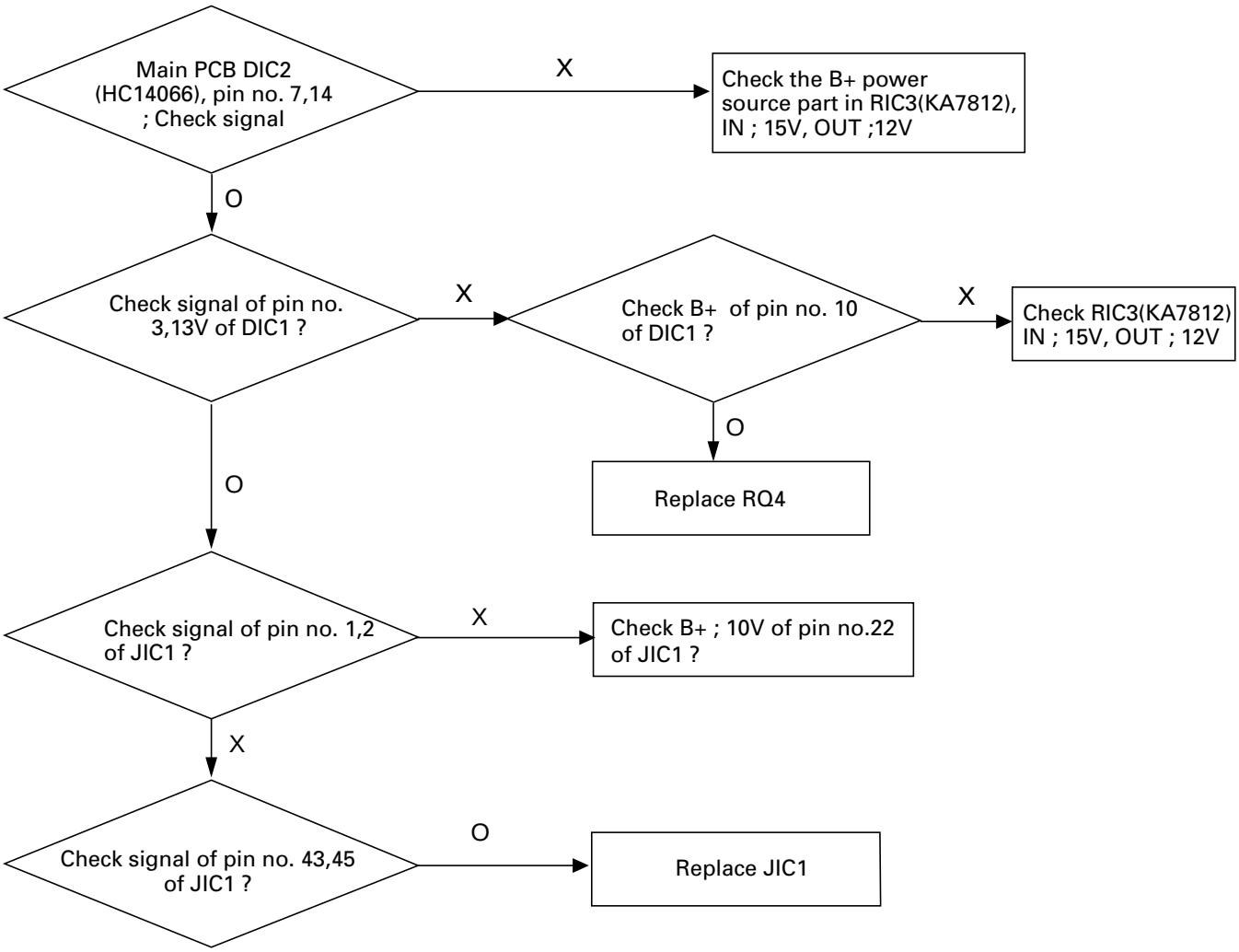
6-2-1 Power Malfunction


Main PCB µ-com VDD(5V) normal?
UIC1 pin no. 18,47,90
X
Main PCB RIC4(BA7805) IN : 5V Input voltage normal ?
X
Check the Power PCB ; RD1,RD2(IN5392) At the base of Main PCB ; RFS1,2 (T2A 250V)
O
Replace RIC4
O
Main PCB Does UX2(12MHz) oscillope ?
X
Main PCB POSNS voltage normal ? (pin no. 29 ; 4.5V)
X
Check the Main PCB ; CSW1
O
Main PCB Check µ-com vpp pin no.48
X
Replace UIC1

6-2-2 F.L.T Malfunction

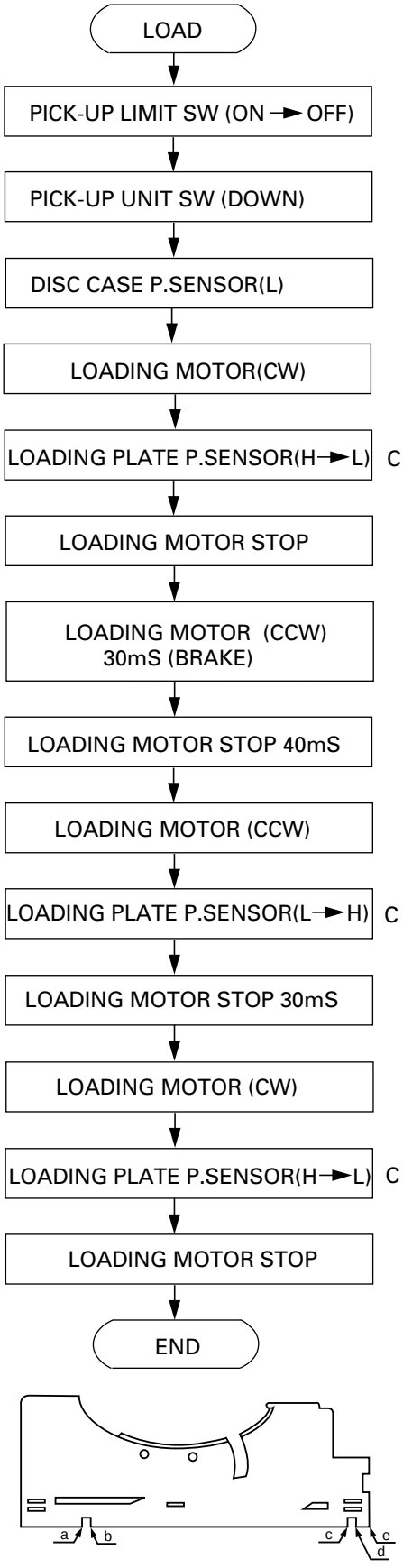


6-2-3 No Output

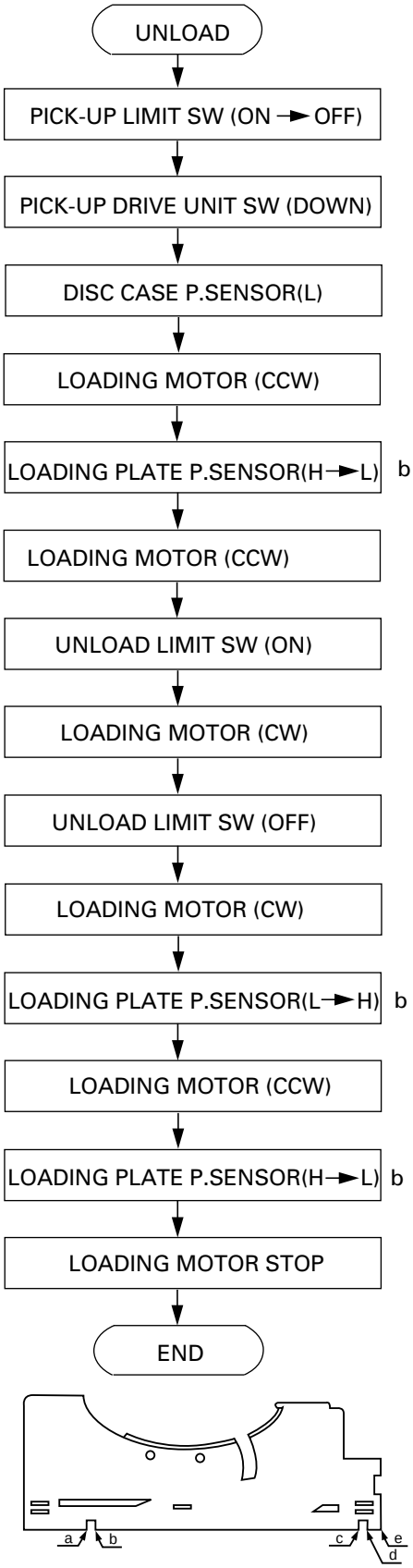

Main PCB DIC2 (HC14066), pin no. 7,14 ; Check signal
X
Check the B+ power source part in RIC3(KA7812), IN ; 15V, OUT ;12V
O
Check signal of pin no. 3,13V of DIC1 ?
X
Check B+ of pin no. 10 of DIC1 ?
X
Check RIC3(KA7812) IN ; 15V, OUT ; 12V
O
Replace RQ4
O
Check signal of pin no. 1,2 of JIC1 ?
X
Check B+ ; 10V of pin no.22 of JIC1 ?
X
Check signal of pin no. 43,45 of JIC1 ?
O
Replace JIC1

6-3 CD Section

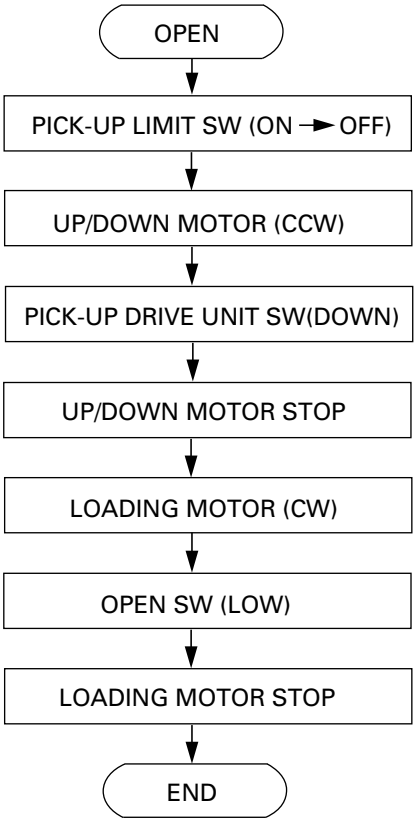
6-3-1 Load Operation



6-3-2 Unload Operation



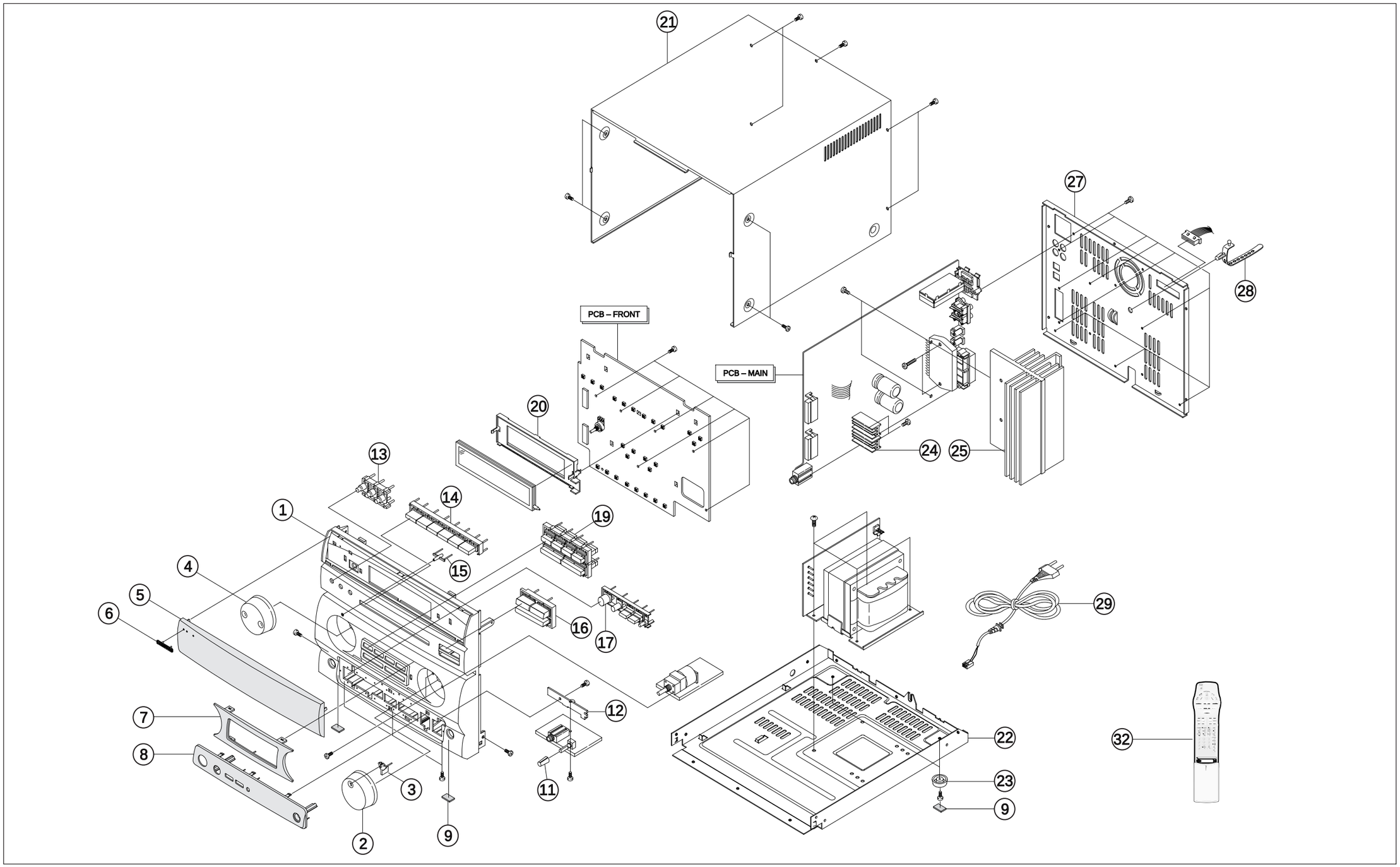
6-3-3 Open Operation



7.Exploded Views and Parts List

7-1 Amp and Tuner Section

7-1-1 Amp and Tuner Exploded View



7-1-2 Parts List

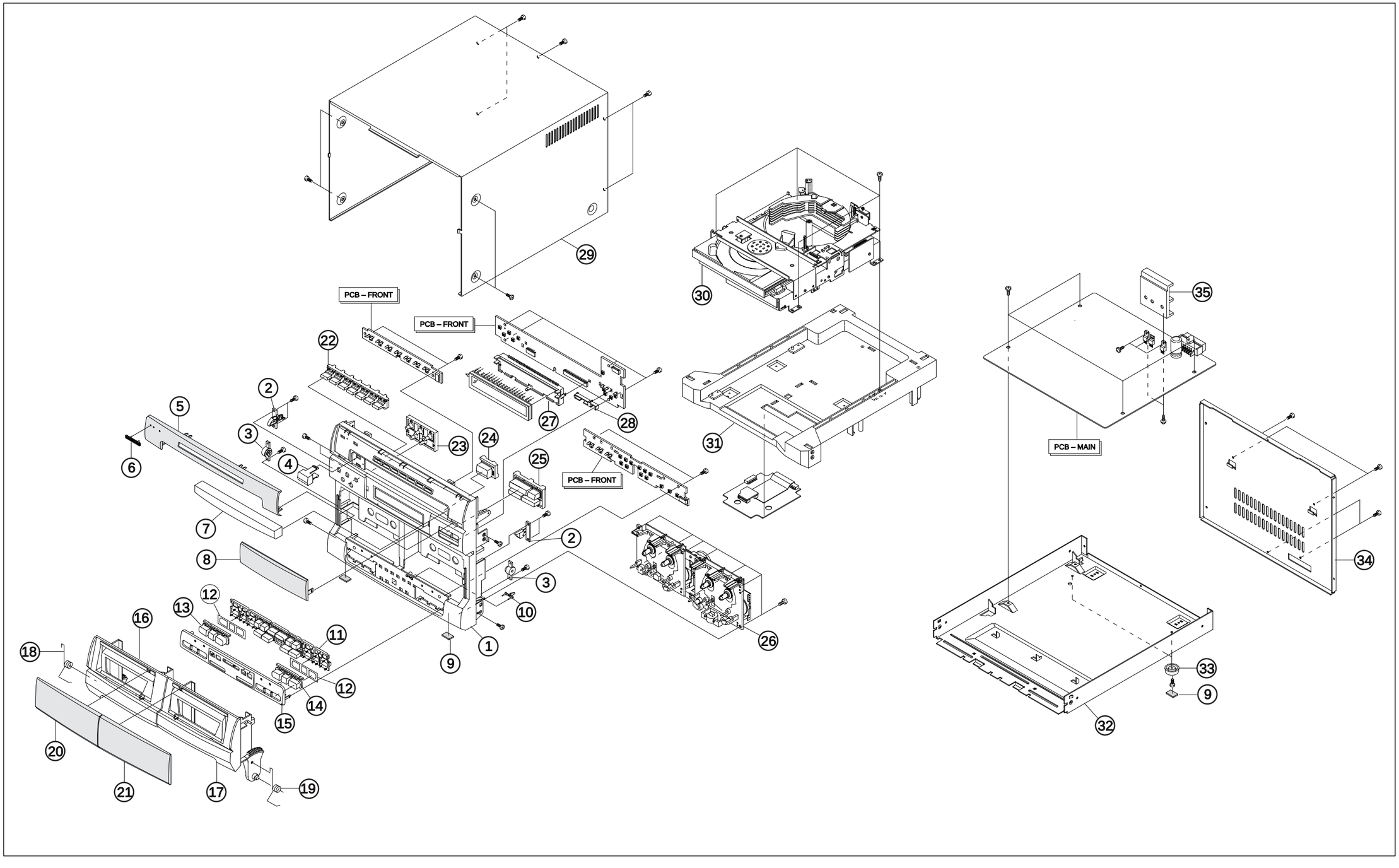
No.	New Parts No.	Description	Specification	Old Parts No.
1	AH64-30355C	CABINET-FRONT	MIPS 94HB BLK	
2	AH64-11027B	KNOB-VOLUME	ABS 94HB BLK	
3	AH67-10107A	LENS-VOLUME	PMMA TRP	
4	AH64-11028B	KNOB-CONTROL	ABS 94HB BLK	
5	AH64-40357C	WINDOW-TUNER	PMMA VIOLET	
6	AH64-70003B	BADGE-BRAND	ALS	
7	AH64-40358A	WINDOW-CENTER	PMMA VIOLET	
8	AH61-20365C	CAP-FRONT	ABS 94HB BLK	
9	AH69-20031A	CUSHION-FOOT	EVA BLK	
11	AH64-11034A	KNOB-ROTARY	ABS 94HB BLK	
12	AH61-10623A	BRKT-MIC	SECC 1.0T	
13	AH64-11029A	KNOB-PRESET	ABS 94HB BLK	
14	AH64-11030A	KNOB-FUNCTION	ABS 94HB BLK	
15	AH67-10108A	LENS-CONTROL	PMMA TRP	
16	AH64-11031C	KNOB-TUNING	ABS 94HB BLK	
17	AH64-11032B	KNOB-POWER	ABS 94HB BLK	
19	AH95-50225A	ASSY-H/CENTER	MAX670R,ABS	
20	AH61-20363A	HOLDER-FLT	ABS 94HB BLK	
21	AH64-30214E	CABINET-TOP	V/STEEL GRAY	
22	AH64-30354A	CABINET-BOTTOM	SECC 1.0T	
23	AH64-80031A	FOOT	ABS 94HB BLK	
24	AH62-30064D	HEAT-SINK	AL ANODZING BLK H47	
25	AH62-30100A	HEAT-SINK,M	ALS	
27	AH64-30357C	CABINET-REAR	SECC 0.8T	
28	66634-602-610	CLAMPER-WIRE	NYLON 6.6 BLK	
29	AH39-10002L	POWER-CORD	KLCE-2F 2.15M, 5239.V	A6006-0187
32	AH59-10080H	REMOCON-ASS'Y	-,-,BU2478-2Z, 60, MAX670R/EXP,S	

7-2-2 Parts List

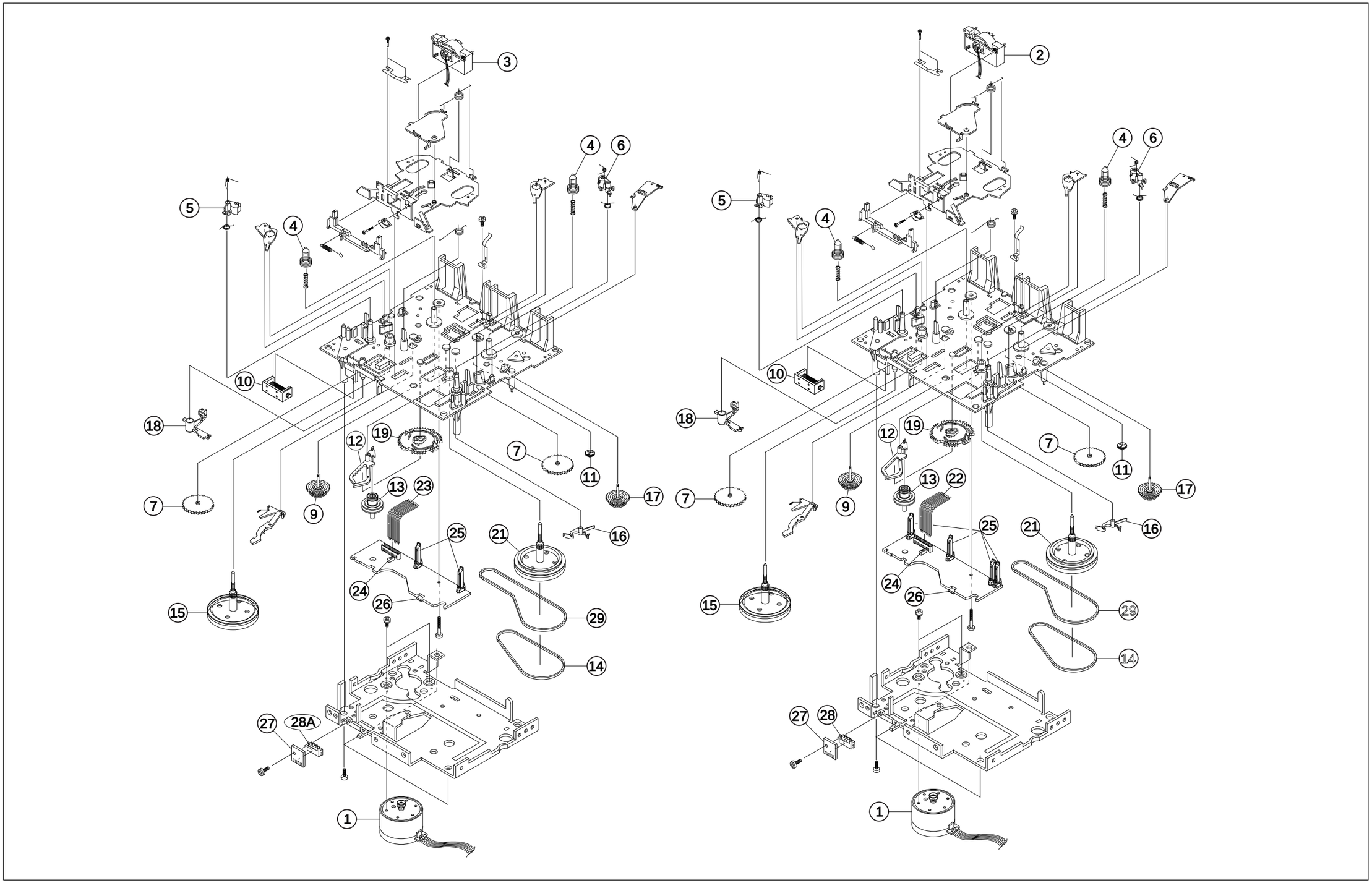
No.	New Parts No.	Description	Specification	Old Parts No.
1	AH64-30358C	CABINET-FRONT	MIPS 94HB BLK	
2	AH95-50001A	ASSY-LATCH	MAX-555	
3	AH61-80030A	DEMPER-ASSY	POM M0.8 BLK	
4	AH61-20369B	CAP-CD	ABS 94HB BLK	
5	AH64-40362C	WINDOW-FRONT	PMMA VIOLET	
6	AH64-70003B	BADGE-BRAND	ALS	
7	AH64-50309B	DOOR-CD	ABS 94HB BLK	
8	AH64-40359A	WINDOW-CD	PMMA VIOLET	
9	AH69-20031A	CUSHION-FOOT	EVA BLK	
10	AH67-10115A	LENS-DECK(LED)	PMMA TRP	
11	AH64-11037B	KNOB-DECK	ABS 94HB BLK	
12	AH67-40019A	FILTER-DECK	PC T0.3 WHT	
13	AH67-10113B	LENS-DECK(A)	PMMA TRP+Tio2	
14	AH67-10114B	LENS-DECK(B)	PMMA TRP+Tio2	
15	AH61-20368C	CAP-FRONT(M)	ABS 94HB BLK	
16	AH64-50307B	DOOR-CASS(A)	ABS 94HB BLK	
17	AH64-50308B	DOOR-CASS(B)	ABS 94HB BLK	
18	AH61-60301A	SPRING-EJECT(A)	SUS PI 1.0	
19	AH61-60302A	SPRING-EJECT(B)	SUS PI 1.0	
20	AH64-40360C	WINDOW-DOOR(A)	PMMA VIOLET	
21	AH64-40361C	WINDOW-DOOR(B)	PMMA VIOLET	
22	AH64-11038B	KNOB-EXTRA	ABS WHT+MILKY	
23	AH64-11035A	KNOB-PROGRAM	ABS BLK+MILKY	
24	AH64-11036C	KNOB-CD OPEN	ABS 94HB BLK	
25	AH61-20370B	KNOB-CD PLAY	ABS 94HB BLK	
26	AH91-60104A	ASSY-DECK TAPE	MAX670Z, -, -	
27	AH61-20057A	HOLDER-FLT	ABS 94HB BLK	
28	AH61-20370A	HOLDER-CD PLAY	ABS 94HB WHT	
29	AH64-30214E	CABINET-TOP	V/STEEL GRAY	
30	AH59-20001G	DECK-CDP	TN2300N-115,-,CDP,-,	17159-0086-00
31	AH61-10624A	CHASSIS-MECHA	ABS 94HB BLK	
32	AH64-30154A	CABINET-BOTTOM	SECC 0.8T	
33	AH64-80031A	FOOT	ABS 94HB BLK	
34	AH64-30359C	CABINET-REAR	SECC 0.8T	
35	AH62-30112A	HEAT-SINK TR	-, ALS , -,T4.0	

7-2 Cassette Deck and CD Section

7-2-1 Cassette Deck and CD Exploded View



7-2-3 Cassette Deck Expolded View



7-2-4 Parts List

No.	New Parts No.	Description	Specification	Old Parts No.
	AH59-20002U	DECK-CASSETTE	CRF451	17159-0037-00
	AH59-20002V	DECK-CASSETTE	CRF452	17159-0038-00
1	AH81-10021W	MOTOR	SHW2L	10000-503-004
2	AH81-10022J	ASS'Y HOLDER HEAD	YK56RAB4N3	10000-524-023
3	AH81-10022K	ASS'Y HOLDER HEAD	MK10PAB2N1	10000-524-024
4	AH81-10031U	CAP REEL	22-222-4041	10000-611-009
5	AH81-10031V	ASS'Y PINCH ARM L	22-093-4149	10000-611-010
6	AH81-10031W	ASS'Y PINCH ARM R	22-093-4150	10000-611-012
7	AH81-10033E	GEAR PLAY	22-222-4282	10000-611-057
9	AH81-10031Z	ASS'Y SUB REEL L	22-093-3071	10000-611-017
10	AH81-10032A	SOLENOID	07-W021C	10000-611-018
11	AH81-10032B	GEAR FF	22-222-4048	10000-611-021
12	AH81-10032C	ASS'Y ARM FR	22-093-4061	10000-611-022
13	AH81-10033H	ASS'Y PULLEY FR	22-093-3918	10000-611-063
14	AH81-10033J	BLET FR	02-083-4127	10000-611-064
15	AH81-10033K	ASS'Y FLYWHEEL L	22-220-3738	10000-611-065
16	AH81-10032H	ARM BRAKE	22-239-3028	10000-611-028
17	AH81-10032J	ASS'Y SUB REEL R	22-093-4151	10000-611-029
18	AH81-10032K	ARM TRIGER	22-268-3008	10000-611-030
19	AH81-10032L	GEAR-CAM	22-221-2090	10000-611-031
21	AH81-10033L	ASS'Y FLYWHEEL R	22-093-3917	10000-611-066
22	AH81-10032N	WIRE(13P)	22-072-4080	10000-611-035
23	AH81-10032V	WIRE(11P)	22-072-4313	10000-611-048
24	AH81-10032Y	SWITCH MODE	04-SW150	10000-611-051
25	AH81-10032Q	SWITCH LEAF	04-MTS1004MVJ1	10000-611-039
26	AH81-10032R	HALL IC	00-LB9051A	10000-611-040
27	AH81-10032T	P.C.BOARD	22-070-4046	10000-611-046
28	AH81-10032U	HOUSING	00-S5BEH	10000-611-047
28A	AH81-10033A	HOUSING	00-S3BEH	10000-611-053
29	AH81-10033M	BELT MAIN	02-084-4128	10000-611-067

8. Electrical Parts List

Loc No.	New Part No.	Description	Specification	Old Part No.
AH90-10485E	ASSY-MAIN PCB;MAX670R/CHN,DOMESTIC			
TD5,6,7,8,ED1,2,3,4,PD9	0401-000101	DIODE-SWITCHING;1N4148,100V,200MA,5		
TD1,2,3,4,ED5,6,7,8				
PD1,2,3	0402-000125	DIODE-RECTIFIER;1N4001,50V,1A,DO-41		A4104-0001
PBD1	0402-000450	DIODE-BRIDGE;PBL403,200V,4.0A,DIP-4		12169-219-330
PBD2	0402-001010	DIODE-BRIDGE;GBU6D,200V,6A,SIP-4		
PZD12	0403-000342	DIODE-ZENER;UZ3.6BSA,3.6V,3.47-3.68		12169-404-770
PZD6,KZD1	0403-000355	DIODE-ZENER;UZ5.1BSB,5.1V,4.97-5.18		12169-404-780
PZD4	0403-000358	DIODE-ZENER;UZ5.6BSB,5.6V,5.46-5.7V		12169-404-790
PZD13	0403-000369	DIODE-ZENER;UZ8.2BM,8.2V,7.9-8.5V,5		12169-403-290
EZD1,PZD7	0403-000374	DIODE-ZENER;UZ9.1BSC,9.1V,8.89-9.29		12169-404-840
PZD2	0403-000391	DIODE-ZENER;UZP36B,36V,34-39V,1W,DO		A4106-0115
DZD1	0403-000393	DIODE-ZENER;UZP5.1B,5.1V,4.8-5.4V,1		12169-403-330
VZD1,PZD1	0403-000394	DIODE-ZENER;UZP5.6B,5.6V,5.2-6.0V,1		12169-404-110
TZD1	0403-000398	DIODE-ZENER;UZP8.2B,8.2V,7.7-8.7V,1		12169-403-600
TQ6,VQ1,2	0501-000294	TR-SMALL SIGNAL;KSA708,PNP,800MW,TO		12149-101-560
PQ13	0501-000369	TR-SMALL SIGNAL;-,NPN,1W,TO-92L,-,1		12149-301-910
TQ7,9	0501-000392	TR-SMALL SIGNAL;-,NPN,250MW,TO-92,-		12149-301-860
TQ8	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250MW,TO		12149-301-900
PQ12,3,VQ3,4,TQ5	0501-000407	TR-SMALL SIGNAL;-,NPN,800MW,TO-92,-		12149-401-150
PQ1	0502-000304	TR-POWER;-,NPN,1W,TO-126,TP,60-400		12149-401-900
PQ2	0502-000424	TR-POWER;2SB1566-F,PNP,2W,TO-220FN,		B4052-0086
PQ11	0504-000203	TR-DIGITAL;-,NPN,300MW,47K-47K,TO-9		
DIC2,HIC1,FIC2,EIC2	1201-000163	IC-OP AMP;4560,SOP,8P,150MIL,DUAL,1		12119-401-300
PIC2	1203-000110	IC-NEGA.FIXED REG.;7912,TO-220,3P,-		12109-401-700
PIC3	1203-000242	IC-POSI.FIXED REG.;7812,TO-220,3P,-		12109-401-690
PIC1	1203-000294	IC-POSI.FIXED REG.;7808,TO-220,3P,-		12109-401-730
FIC1	1204-000235	IC-VOLUME CONTROL;TDA7318,SOP,28P,-		B4008-1199
PR1-1,PR2-2,PR3-3,PR4-4	13954-100-310	CERAMIC-PIPE;PI1.4 15MM WHT		
ER3,10	2001-000008	R-CARBON;15KOHM,5%,1/8W,AA,TP,1.8X3		11018-877-153
KR18	2001-000028	R-CARBON(S);100OHM,5%,1/2W,AA,TP,2.		11018-377-101
PR12	2001-000038	R-CARBON;390OHM,5%,1/4W,AA,TP,2.4X6		11018-277-391
PR8	2001-000241	R-CARBON;1.5KOHM,5%,1/8W,AA,TP,1.8X		11018-877-152
HR12,13,TR6	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3		11018-877-103
JW179	2001-000302	R-CARBON;10OHM,5%,1/8W,AA,TP,1.8X3.		11018-877-100
VR2	2001-000362	R-CARBON;150OHM,5%,1/8W,AA,TP,1.8X3		11018-877-151
TR20	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.		11018-877-102
ER5,7,DR15,16,TR56,64	2001-000449	R-CARBON;2.2KOHM,5%,1/8W,AA,TP,1.8X		11018-877-222
VR7,8,ER34,TR66				
ER6,8	2001-000508	R-CARBON;220KOHM,5%,1/8W,AA,TP,1.8X		11018-877-224
TR5,52,PR7,VR5,3	2001-000522	R-CARBON;22KOHM,5%,1/8W,AA,TP,1.8X3		11018-877-223
ER18,19,PR6,TR4,7				
TR69	2001-000525	R-CARBON;22OHM,5%,1/4W,AA,TP,2.4X6.		11018-277-220
ER1,2,22,VR9,TR68	2001-000734	R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X		11018-877-472
VR10,PR30,29	2001-000734	R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X		11018-877-472
VR4,6	2001-000780	R-CARBON;470OHM,5%,1/8W,AA,TP,1.8X3		11018-877-471
TR53	2001-000786	R-CARBON;47KOHM,5%,1/8W,AA,TP,1.8X3		11018-877-473
PR16,TR25	2001-000812	R-CARBON;5.6KOHM,5%,1/8W,AA,TP,1.8X		11018-877-562

Loc No.	New Part No.	Description	Specification	Old Part No.
PR11	2001-000855	R-CARBON;560OHM,5%,1/4W,AA,TP,2.4X6		11018-257-561
ER4,9	2001-000857	R-CARBON;560OHM,5%,1/8W,AA,TP,1.8X3		11018-877-561
ER20,21	2001-000869	R-CARBON;56OHM,5%,1/8W,AA,TP,1.8X3.		11018-877-560
FR19,20	2001-000938	R-CARBON;68OHM,5%,1/8W,AA,TP,1.8X3.		11018-877-680
PR13,14	2001-001153	R-CARBON(S);47OHM,5%,1/2W,AA,TP,2.4		11018-377-470
PR15,TR48	2003-000008	R-METAL OXIDE(S);100OHM,5%,1W,AA,TP		11048-477-101
PR2	2003-000616	R-METAL OXIDE(S);27OHM,5%,2W,AA,TP,		11048-577-270
VR1,VR11	2003-000674	R-METAL OXIDE(S);39OHM,5%,1W,AA,TP,		11048-477-390
PR3,4	2003-000690	R-METAL OXIDE(S);4.7OHM,5%,2W,AA,TP		11048-577-479
ER24	2003-000710	R-METAL OXIDE(S);47OHM,5%,2W,AA,TP,		11048-577-470
PR1	2003-000780	R-METAL OXIDE(S);68OHM,5%,3W,AA,TP,		11048-677-680
TR59	2007-000030	R-CHIP;560OHM,5%,1/10W,DA,TP,2012		11119-101-561
ER26,29,FR15,18	2007-000241	R-CHIP;1.5KOHM,5%,1/10W,DA,TP,2012		11119-101-152
TR2,22,23,24,FR11,13 ER27,28,TR58	2007-000282	R-CHIP;100KOHM,5%,1/10W,DA,TP,2012		11119-101-104
TR61	2007-000290	R-CHIP;100OHM,5%,1/10W,DA,TP,2012		11119-101-101
TR9,15,16,17,18,35,36,67 TR51,PR5	2007-000300	R-CHIP;10KOHM,5%,1/10W,DA,TP,2012		11119-101-103
TR28,HR17	2007-000308	R-CHIP;10OHM,5%,1/10W,DA,TP,2012		11119-101-100
TR8,PR17	2007-000355	R-CHIP;12KOHM,5%,1/10W,DA,TP,2012		11119-101-123
ER33,TR34,63	2007-000409	R-CHIP;15KOHM,5%,1/10W,DA,TP,2012		11119-101-153
TR14,31	2007-000468	R-CHIP;1KOHM,5%,1/10W,DA,TP,2012		11119-101-102
DR14	2007-000477	R-CHIP;1MOHM,5%,1/10W,DA,TP,2012		11119-101-105
HR2,6,TR1,19,39 TR40,FR1,4,5,7,16,17 ER32,DR18,19,21,22	2007-000493	R-CHIP;2.2KOHM,5%,1/10W,DA,TP,2012		11119-101-222
TR30	2007-000518	R-CHIP;2.7KOHM,5%,1/10W,DA,TP,2012		11119-101-272
TR27,65	2007-000572	R-CHIP;220OHM,5%,1/10W,DA,TP,2012		11119-101-221
TR32,33,ER35	2007-000586	R-CHIP;22KOHM,5%,1/10W,DA,TP,2012		11119-101-223
TR37	2007-000593	R-CHIP;22OHM,5%,1/10W,DA,TP,2012		11119-101-220
TR55,38,ER16,17	2007-000686	R-CHIP;3.3KOHM,5%,1/10W,DA,TP,2012		11119-101-332
ER25,30,FR9,10,TR45,PR9	2007-000710	R-CHIP;3.9KOHM,5%,1/10W,DA,TP,2012		11119-101-392
DR10,HR3,7	2007-000774	R-CHIP;33KOHM,5%,1/10W,DA,TP,2012		11119-101-333
TR29	2007-000822	R-CHIP;390OHM,5%,1/10W,DA,TP,2012		11119-101-391
FR2,3,6,8	2007-000830	R-CHIP;39KOHM,5%,1/10W,DA,TP,2012		11119-101-393
ER11,12,TR12,21,PR33	2007-000872	R-CHIP;4.7KOHM,5%,1/10W,DA,TP,2012		11119-101-472
DR12,13,17,20,ER13 HR1,4,5,8,9,16	2007-000941	R-CHIP;47KOHM,5%,1/10W,DA,TP,2012		11119-101-473
TR46,47,PR10	2007-001071	R-CHIP;6.8KOHM,5%,1/10W,DA,TP,2012		11119-101-682
TR62	2007-001133	R-CHIP;68OHM,5%,1/10W,DA,TP,2012		11119-101-680
ER14,15,TR13,49,50	2007-001177	R-CHIP;8.2KOHM,5%,1/10W,DA,TP,2012		11119-101-822
DR11	2007-001208	R-CHIP;82KOHM,5%,1/10W,DA,TP,2012		11119-101-823
EVR1	2101-000274	VR-ROTARY;5KOHM,20%,1/20W,SIDE		B1050-0041
TVR2	2103-000291	VR-SEMI;20KOHM,30%,1/10W,SIDE		11249-102-043
TVR1	2103-000493	VR-SEMI;5KOHM,30%,1/10W,SIDE		11249-102-023
VR13	2109-000109	VR-MOTOR;50KOHM,20%,1/20W,SIDE		B1050-0013
EC26,27	2201-000300	C-CERAMIC,DISC;1NF,20%,50V,Y5T,4X4,		11417-329-102
PC21,TC8,28	2201-000565	C-CERAMIC,DISC;47nF,20%,50V,Y5V,12.		11417-344-473
TC39,DC13,17	2203-000192	C-CERAMIC,CHIP;100NF,+80-20%,50V,Y5		11129-001-104
FR12,14,TC6	2203-000239	C-CERAMIC,CHIP;100PF,5%,50V,NPO,201		11129-009-101

Loc No.	New Part No.	Description	Specification	Old Part No.
DC11,19	2203-000260	C-CERAMIC,CHIP;10NF,10%,50V,X7R,201		11129-004-103
FC14,15,16,17	2203-000347	C-CERAMIC,CHIP;150NF,10%,50V,NPO,20		A1100-0988
TC43	2203-000408	C-CERAMIC,CHIP;180PF,5%,50V,NPO,201		11129-008-181
DC14,18,TC36,37	2203-000495	C-CERAMIC,CHIP;2.2NF,10%,50V,X7R,20		11129-004-222
HC5,8,FC1,2,3,4	2203-000595	C-CERAMIC,CHIP;220PF,5%,50V,NPO,201		11129-001-221
TC4,14,40	2203-000609	C-CERAMIC,CHIP;22NF,10%,50V,X7R,201		11129-004-223
TC3	2203-000648	C-CERAMIC,CHIP;24PF,5%,50V,NPO,2012		11129-009-240
FC24,25	2203-000787	C-CERAMIC,CHIP;330PF,5%,50V,NPO,201		
TC22,23	2203-000802	C-CERAMIC,CHIP;33NF,10%,50V,X7R,201		11129-001-333
PC3,4,8,9,10,17,19,20	2203-000844	C-CERAMIC,CHIP;39NF,10%,50V,X7R,201		11129-019-393
TC19	2203-000891	C-CERAMIC,CHIP;4.7NF,10%,50V,X7R,20		11129-012-472
DC12,16	2203-000925	C-CERAMIC,CHIP;470NF,+80-20%,50V,Y5		11128-018-474
DC24	2203-000953	C-CERAMIC,CHIP;470PF,5%,50V,NPO,201		11129-004-471
TC13,41,29	2203-000979	C-CERAMIC,CHIP;47NF,10%,50V,X7R,201		
DC22,DC15,TC2	2203-001137	C-CERAMIC,CHIP;68NF,+80-20%,50V,Y5V		11129-004-683
TC20	2203-001223	C-CERAMIC,CHIP;820PF,10%,50V,X7R,20		A1100-0023
TC44,16	2203-001517	C-CERAMIC,CHIP;15PF,5%,50V,NPO,2012		
DC20,21	2203-001524	C-CERAMIC,CHIP;47PF,5%,50V,NPO,2012		
TC10,EC25	2203-001537	C-CERAMIC,CHIP;1NF,10%,50V,X7R,2012		
DC23	2203-001550	C-CERAMIC,CHIP;1.2NF,10%,50V,X7R,20		
FC12,13	2203-001551	C-CERAMIC,CHIP;1.5NF,10%,50V,X7R,20		
TC17	2203-001611	C-CERAMIC,CHIP;22PF,5%,50V,NPO,2012		
EC4	2301-000449	C-FILM,PEF;47NF,10%,50V,8X11X4.5MM,		
EC7,17,TC12,27	2401-000419	C-AL;10UF,20%,16V,GP,5X11,5,-		
TC33	2401-000438	C-AL;10UF,20%,25V,GP,5*11,2MM,		11608-104-103
EC28,29	2401-000459	C-AL;10UF,20%,35V,GP,5*7,2MM,TP		11608-155-103
TC24	2401-000795	C-AL;220UF,20%,16V,GP,8X11.5,3.5MM,		
PC12,TC45	2401-001019	C-AL;3.3UF,20%,50V,GP,4X7,1.5MM,		
PC13	2401-001413	C-AL;470UF,20%,35V,GP,10X20,5MM,		11609-402-130
HC1,2	2401-001538	C-AL;47UF,20%,25V,GP,6X11,2.5MM,-		
EC11,22,VC1,KC22	2401-001895	C-AL;100UF,20%,16V,GP,6.3X11MM,2.5M		
DC7,8,9,10,EC8	2401-001912	C-AL;1UF,20%,50V,GP,5X11MM,2MM,BK		
EC14	2401-001917	C-AL;1UF,20%,6.3V,-,4X7MM,5,TP		
HC3,4,TC21,31,32,34,35				
EC9,10,12,13	2401-001919	C-AL;2.2UF,20%,50V,-,4X7MM,5,TP		
FC6,7,9				
FC5,10,11,18,19				
EC15,16				
FC22,23	2401-001938	C-AL;22UF,20%,25V,GP,5X11MM,2MM,BK		
DC1,2,3,5	2401-001940	C-AL;3.3UF,20%,50V,LL,5X11MM,5MM,TP		11608-306-332
PC14	2401-001942	C-AL;3300UF,20%,35V,GP,18X35.5MM,7.		11607-105-332
PC5	2401-001945	C-AL;330UF,20%,50V,GP,10X20MM,5MM,B		11607-106-331
PC11,15,16,EC6,19	2401-001954	C-AL;4.7UF,20%,50V,GP,5X11MM,5,TP		
TC25,26				
EC3,5,23,24,FC20,21	2401-001955	C-AL;4.7UF,20%,50V,LL,5X11MM,5MM,TP		11608-306-472
TC30	2401-001968	C-AL;470NF,20%,50V,GP,5X11MM,5,TP		
DC25,26,TC15	2401-001975	C-AL;47UF,20%,16V,GP,5X11MM,5,TP		
FC8,TC18,PC6,7				
PC18,TC42				
VC4	2401-001990	C-AL;10UF,20%,25V,BP,5X11MM,5MM,TP		11608-204-100

Loc No.	New Part No.	Description Specification	Old Part No.
TC7	2404-000250	C-TA,CHIP;470NF,20%,25V,-,3216,-,TP	
HL1,2,3	2701-000114	INDUCTOR-AXIAL;10UH,10%,2.5X3.4MM	12429-411-100
TX3	2801-000734	CRYSTAL-UNIT;7.2MHZ,50PPM,28-AAM,12	14539-501-140
DX1	2802-000158	RESONATOR-CERAMIC;4MHZ,0.5%,TP,10.0	14534-504-043
TX1	2802-000215	RESONATOR-CERAMIC;19KHZ,+-38HZ,-,7.	14539-504-100
TFL1,3	2903-000105	FILTER-CERAMIC;BP,10.7MHZ+-25KHZ	14529-301-753
TFL4	2903-000148	FILTER-CERAMIC;BP,450KHZ+-1KHZ	A1243-0049
ZCW1	3708-001045	CONNECTOR-FPC/FC/PIC;15P,1.5MM,STRA	
CMW1,2	3710-000541	CONNECTOR-SOCKET;20P,-,1.25MM,STRAI	
VCW1	3711-000588	CONNECTOR-HEADER;BOX,10P,1R,2.5MM,S	13349-103-103
ECW1	3711-003112	CONNECTOR-HEADER;BOX,8P,1R,2.5MM,-,	
ANT-JACK	3716-000201	TERMINAL-BLOCK;NON SOLDER,4P,4MM,-,	A3059-0006
SPK-JACK	3716-000204	TERMINAL-BLOCK;NON SOLDER,4P,11MM,-	A3059-0017
EJACK1,HJACK1	3722-000363	JACK-PHONE;9P,6.4MM,AU,BLK,-	A3040-0115
FJACK1	3722-000383	JACK-RCA;6P/4C,3.5MM,SN,BLK,#16~22	A3040-0241
DIC1	AH14-10007E	IC;M65846FP,SOP,STICK DSP/ECHO	
EIC1	AH14-10007F	IC;M62453SP,DIP,STICK VOCAL FADER/M	
TIC2	AH14-10007G	IC;LC72131,DIP,STICK PLL	
TIC1	AH14-10007H	IC;LA1836,DIP,STICK IF+MPX	
TFL5,6	AH26-10001A	TRANS-IF;FV-AD-BASE19K/38K,LOW PASS	12450-304-040
TL1	AH26-10001E	TRANS-IF;KS940228-09,-,-,7.6X12.0,-	12619-030-005
TL2	AH26-10020A	TRANS-DET;-,7KLL,DET,-,7.8MM,91PF,1	
TML1	AH27-80060A	COIL-OSC;RBW07VB,345UH,AM+RF	
PW1	AH39-20514A	LEAD CONNECTOR-ASSY;-,5264,51088,10	
R-Z CONNECTOR	AH39-20529A	LEAD CONNECTOR-ASSY;-,52305,51044,2	
EW1	AH39-20542A	LEAD CONNECTOR-ASSY;-,5264,51088,8P	
VW1	AH39-20543A	LEAD CONNECTOR-ASSY;-,5264,51088,10	
TO CHASSIS ANT	AH39-50001H	LEAD-FASTEN;RING,1007#24,100MM,BLK	13059-201-103
FEDP	AH40-10025A	TUNER-FM;FTA4-551H,4G,75OHM	
	AH62-30060A	HEAT SINK-CD;AL,-,T1.0,-,-,-,SCM-70	15684-505-820
HEATSINK	AH62-30064D	HEAT SINK;DAT7000,AL,-,ANODIZING,BL	15684-509-730
	AH62-30100A	HEAT SINK-M;-,ALS,-,-,-,-,-,MAX670R	
	AH62-30117A	HEAT SINK-TR;-,ALS,-,T2.0,-,-,-,MAX	
SZD1,2	0403-000374	DIODE-ZENER;UZ9.1BSC,9.1V,8.89-9.29	12169-404-840
SQ2	0504-000146	TR-DIGITAL;-,PNP,300MW,47K-47K,TO-9	12159-301-760
SQ1,3	0504-000203	TR-DIGITAL;-,NPN,300MW,47K-47K,TO-9	
SIC2	1001-000111	IC-ANALOG SWITCH;GD4066B,BILATERAL	
SIC1	1201-000463	IC-OP AMP;074,SOP,14P,196MIL,SINGLE	
SR43	2001-000857	R-CARBON;560OHM,5%,1/8W,AA,TP,1.8X3	11018-877-561
SR42	2003-000502	R-METAL OXIDE(S);150OHM,5%,2W,AA,TP	11048-577-151
SR35,37	2007-000001	R-CHIP;68KOHM,5%,1/10W,DA,TP,2012	11119-101-683
SR41,15	2007-000030	R-CHIP;560OHM,5%,1/10W,DA,TP,2012	11119-101-561
SR23	2007-000241	R-CHIP;1.5KOHM,5%,1/10W,DA,TP,2012	11119-101-152
SR34,18	2007-000338	R-CHIP;120KOHM,5%,1/10W,DA,TP,2012	11119-101-124
SR17	2007-000409	R-CHIP;15KOHM,5%,1/10W,DA,TP,2012	11119-101-153
SR30	2007-000457	R-CHIP;18KOHM,5%,1/10W,DA,TP,2012	11119-101-183
SR6,8	2007-000468	R-CHIP;1KOHM,5%,1/10W,DA,TP,2012	11119-101-102
SR19,31,39	2007-000572	R-CHIP;220OHM,5%,1/10W,DA,TP,2012	11119-101-221
SR5,7,24,10	2007-000586	R-CHIP;22KOHM,5%,1/10W,DA,TP,2012	11119-101-223
SR29,1,2	2007-000653	R-CHIP;27KOHM,5%,1/10W,DA,TP,2012	11119-101-273

Loc No.	New Code No.	Description	Specification	Old Code No.
SR9	2007-000710	R-CHIP;3.9KOHM,5%,1/10W,DA,TP,2012		11119-101-392
SR13,14,36,38,12,40	2007-000774	R-CHIP;33KOHM,5%,1/10W,DA,TP,2012		11119-101-333
SR28,32				
SR16	2007-000931	R-CHIP;470OHM,5%,1/10W,DA,TP,2012		11119-101-471
SR3,4	2007-000941	R-CHIP;47KOHM,5%,1/10W,DA,TP,2012		11119-101-473
SR21,25				
SR27	2007-001198	R-CHIP;820OHM,1%,1/10W,DA,TP,2012		
SR11,33,22.26	2007-001208	R-CHIP;82KOHM,5%,1/10W,DA,TP,2012		11119-101-823
SC5	2203-000892	C-CERAMIC,CHIP;4.7NF,10%,50V,X7R,20		
SC3,4	2401-000459	C-AL;10UF,20%,35V,GP,5*7,2MM,TP		11608-155-103
SC9,10	2401-001538	C-AL;47UF,20%,25V,GP,6X11,2.5MM,-		
SC1,2	2401-001887	C-AL;100NF,20%,50V,-,4X7MM,5,TP		
SC7,8	2401-001955	C-AL;4.7UF,20%,50V,LL,5X11MM,5MM,TP		11608-306-472
SC6	2401-001967	C-AL;470NF,20%,50V,BP,6X11MM,2MM,BK		
PJACK1,2	3722-000342	JACK-DC POWER;2P,-,NI,BLK,#16~22		13333-501-410
OD8	0401-000101	DIODE-SWITCHING;1N4148,100V,200MA,5		
OD1,2,3,4,5,6,7	0402-000125	DIODE-RECTIFIER;1N4001,50V,1A,DO-41		A4104-0001
OQ3	0501-000303	TR-SMALL SIGNAL;KSA733,PNP,250MW,TO		12149-101-520
OQ2,4	0501-000407	TR-SMALL SIGNAL;-,NPN,800MW,TO-92,-		12149-401-150
OQ5,1	0504-000146	TR-DIGITAL;-,PNP,300MW,47K-47K,TO-9		12159-301-760
OQ7	0504-000203	TR-DIGITAL;-,NPN,300MW,47K-47K,TO-9		
OIC1	1201-001024	IC-POWER AMP;STK4221-2,SIP,22P,78MI		
OR24,28	2001-000028	R-CARBON(S);100OHM,5%,1/2W,AA,TP,2.		11018-377-101
OR27	2001-000273	R-CARBON;100KOHM,5%,1/8W,AA,TP,1.8X		11018-877-104
OR1,3,5	2001-000734	R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X		11018-877-472
OR4	2001-001000	R-CARBON;82KOHM,5%,1/8W,AA,TP,1.8X3		11018-877-823
OR25,26	2001-001088	R-CARBON(S);1KOHM,5%,1/2W,AA,TP,2.4		11018-377-102
OR18,19,20,21	2001-001144	R-CARBON(S);4.7KOHM,5%,1/2W,AA,TP,2		11018-377-472
OR22,23	2003-000690	R-METAL OXIDE(S);4.7OHM,5%,2W,AA,TP		11048-577-479
OR35	2007-000300	R-CHIP;10KOHM,5%,1/10W,DA,TP,2012		11119-101-103
OR9	2007-000355	R-CHIP;12KOHM,5%,1/10W,DA,TP,2012		11119-101-123
OR7,15	2007-000468	R-CHIP;1KOHM,5%,1/10W,DA,TP,2012		11119-101-102
OR29,30	2007-000493	R-CHIP;2.2KOHM,5%,1/10W,DA,TP,2012		11119-101-222
OR34	2007-000586	R-CHIP;22KOHM,5%,1/10W,DA,TP,2012		11119-101-223
OR31,32	2007-000682	R-CHIP;3.3KOHM,1%,1/10W,DA,TP,2012		11119-102-332
OR33	2007-000872	R-CHIP;4.7KOHM,5%,1/10W,DA,TP,2012		11119-101-472
OR11,13	2007-000931	R-CHIP;470OHM,5%,1/10W,DA,TP,2012		11119-101-471
OR10,16,17,8,JW202	2007-000941	R-CHIP;47KOHM,5%,1/10W,DA,TP,2012		11119-101-473
OR12,14	2007-001039	R-CHIP;56KOHM,5%,1/10W,DA,TP,2012		11119-101-563
OR6	2007-001208	R-CHIP;82KOHM,5%,1/10W,DA,TP,2012		11119-101-823
OC1,17	2203-000953	C-CERAMIC,CHIP;470PF,5%,50V,NPO,201		11129-004-471
OC9,11	2301-000375	C-FILM,PEF;100NF,5%,50V,11X12.5X6.5		11505-713-104
PC1,2	2401-000022	C-AL;6800UF,20%,50V,GP,30X35MM,10MM		
OC21	2401-000475	C-AL;10UF,20%,50V,GP,5*11,2MM,		11608-106-100
OC27	2401-001538	C-AL;47UF,20%,25V,GP,6X11,2.5MM,-		
OC4,6,19,20	2401-001572	C-AL;47UF,20%,50V,GP,6.3*11,2.5MM,		11608-106-470
OC3,7,25,26	2401-001902	C-AL;100UF,20%,50V,GP,11X6,-,		A1104-0750
OC5	2401-001945	C-AL;330UF,20%,50V,GP,10X20MM,5MM,B		11607-106-331
OC2,8,22,23,18	2401-002180	C-AL;2.2UF,0.2,50V,GP,5X11,5MM,TP		

Loc No.	New Part No.	Description	Specification	Old Part No.
AH90-10716P		ASSY-FRONT PCB;MAX670R/CHN,EXP 230V		
UD2,3	0401-000101	DIODE-SWITCHING;1N4148,100V,200MA,5		
UD1,4,14	0402-000125	DIODE-RECTIFIER;1N4001,50V,1A,DO-41		A4104-0001
UZD2	0403-000355	DIODE-ZENER;UZ5.1BSB,5.1V,4.97-5.18		12169-404-780
UZD1	0403-000394	DIODE-ZENER;UZP5.6B,5.6V,5.2-6.0V,1		12169-404-110
UQ9	0501-000319	TR-SMALL SIGNAL;-,PNP,1W,TO-92L,TP,		12149-101-590
UQ1	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250MW,TO		12149-301-900
UQ2	0504-000117	TR-DIGITAL;-,NPN,300MW,10K-10K,TO-9		12159-301-840
UQ7,8,11	0504-000144	TR-DIGITAL;KSR2002,PNP,300MW,10K-10		12159-301-340
UQ4,5,6,10	0504-001003	TR-DIGITAL;KSR2003,PNP,300MW,22K-22		
ULD15	0601-000245	LED;ROUND,RED,3.1MM,650NM		12309-001-450
ULD1,2,3,4,5,6,7	0601-001051	LED;ROUND,GRN/RED,3.2MM,563/650NM		
ULD8,9,10,11,12,13,14				
UIC4	1201-000163	IC-OP AMP;4560,SOP,8P,150MIL,DUAL,1		12119-401-300
UIC2	1204-000156	IC-EQUALIZER;BA3834S,DIP,18P,-,PLAS		B4012-0447
UR22	2001-000008	R-CARBON;15KOHM,5%,1/8W,AA,TP,1.8X3		11018-877-153
UR15,17	2001-000241	R-CARBON;1.5KOHM,5%,1/8W,AA,TP,1.8X		11018-877-152
UR59	2001-000273	R-CARBON;100KOHM,5%,1/8W,AA,TP,1.8X		11018-877-104
UR12,13,24,25,26,79,80	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3		11018-877-103
UR72,73,74,75,76,77,78				
UR65,66,67,68,69,70,71				
UR101,128				
UR14,112,113,114	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.		11018-877-102
UR116,121				
UR18,62,63	2001-000449	R-CARBON;2.2KOHM,5%,1/8W,AA,TP,1.8X		11018-877-222
UR19	2001-000472	R-CARBON;2.7KOHM,5%,1/8W,AA,TP,1.8X		11018-877-272
UR5	2001-000508	R-CARBON;220KOHM,5%,1/8W,AA,TP,1.8X		11018-877-224
UR85,64	2001-000522	R-CARBON;22KOHM,5%,1/8W,AA,TP,1.8X3		11018-877-223
UR84	2001-000554	R-CARBON;270OHM,5%,1/8W,AA,TP,1.8X3		11018-877-271
UR23	2001-000660	R-CARBON;33OHM,5%,1/8W,AA,TP,1.8X3.		11018-877-333
UR20,32,UJW15	2001-000734	R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X		11018-877-472
UR33	2001-000890	R-CARBON;6.8KOHM,5%,1/8W,AA,TP,1.8X		11018-877-682
UR21	2001-000977	R-CARBON;8.2KOHM,5%,1/8W,AA,TP,1.8X		11018-877-822
UR119	2003-000513	R-METAL OXIDE(S);15OHM,5%,1W,AA,TP,		11048-477-150
UJW84,85,87,93,UR122	2007-000029	R-CHIP;0OHM,5%,1/10W,DA,TP,2012		11119-101-000
UJW76,77,78,79,80,81	2007-000033	R-CHIP;0OHM,5%,1/8W,DA,TP,3216		11118-001-000
UJW82,83,86				
UR103	2007-000221	R-CHIP;1.2KOHM,5%,1/10W,DA,TP,2012		11119-101-122
UR57,58,35,36	2007-000241	R-CHIP;1.5KOHM,5%,1/10W,DA,TP,2012		11119-101-152
UR106	2007-000282	R-CHIP;100KOHM,5%,1/10W,DA,TP,2012		11119-101-104
UR104,105	2007-000300	R-CHIP;10KOHM,5%,1/10W,DA,TP,2012		11119-101-103
UR102	2007-000355	R-CHIP;12KOHM,5%,1/10W,DA,TP,2012		11119-101-123
UR95,96,97	2007-000449	R-CHIP;180OHM,5%,1/10W,DA,TP,2012		11119-101-181
UR1,2,3,4,6,7,8,9,10	2007-000468	R-CHIP;1KOHM,5%,1/10W,DA,TP,2012		11119-101-102
UR34,39,111,118,127				
UR124,125				
UR126,123	2007-000468	R-CHIP;1KOHM,5%,1/10W,DA,TP,2012		11119-101-102
UR31,37	2007-000493	R-CHIP;2.2KOHM,5%,1/10W,DA,TP,2012		11119-101-222
UR38,98	2007-000518	R-CHIP;2.7KOHM,5%,1/10W,DA,TP,2012		11119-101-272
UR11,92,93,94,86,87,88	2007-000572	R-CHIP;220OHM,5%,1/10W,DA,TP,2012		11119-101-221

Loc No.	New Part No.	Description	Specification	Old Part No.
UR27,28,29,30,45,46	2007-000642	R-CHIP;270OHM,5%,1/10W,DA,TP,2012		11119-101-270
UR47,48,51				
UR52,55,56,89,90,91				
UR49,50,53,54	2007-000822	R-CHIP;390OHM,5%,1/10W,DA,TP,2012		11119-101-391
UR40,42,99,108	2007-000872	R-CHIP;4.7KOHM,5%,1/10W,DA,TP,2012		11119-101-472
UR41	2007-001071	R-CHIP;6.8KOHM,5%,1/10W,DA,TP,2012		11119-101-682
UR107	2007-001201	R-CHIP;820OHM,5%,1/10W,DA,TP,2012		11119-101-821
UC3,4	2201-000223	C-CERAMIC,DISC;12PF,5%,50V,NPO,5.0X		11407-057-120
UC1,2	2201-000423	C-CERAMIC,DISC;27PF,5%,50V,NPO,5.0X		11407-057-270
UC29,15,30	2201-000565	C-CERAMIC,DISC;47nF,20%,50V,Y5V,12.		11417-344-473
UC6	2202-000807	C-CERAMIC,MLC-AXIAL;22NF,+80-20%,25		11448-010-223
UC43,19,7	2202-000854	C-CERAMIC,MLC-AXIAL;47NF,0.3,50V,Y5		
UC34,UC45	2203-000199	C-CERAMIC,CHIP;100NF,+80-20%,50V,Z5		
UC5,31	2203-000844	C-CERAMIC,CHIP;39NF,10%,50V,X7R,201		11129-019-393
UC42	2203-001105	C-CERAMIC,CHIP;6.8NF,10%,50V,X7R,20		11129-004-682
UC35	2203-001214	C-CERAMIC,CHIP;8.2NF,10%,50V,X7R,20		11129-004-822
UC22,23,24,41	2301-000375	C-FILM,PEF;100NF,5%,50V,11X12.5X6.5		11505-713-104
UC8,13,14,20,32	2401-000244	C-AL;100UF,20%,10V,GP,6.3*7,2.5MM,T		11608-152-104
UC17,18	2401-000475	C-AL;10UF,20%,50V,GP,5*11,2MM,		11608-106-100
UC39,44	2401-000918	C-AL;22UF,20%,16V,GP,5X7,5,-		
UC12	2401-001572	C-AL;47UF,20%,50V,GP,6.3*11,2.5MM,		11608-106-470
UC36,37	2401-001893	C-AL;100UF,20%,16V,-,6.3X7MM,5,TP		
UC38	2401-001904	C-AL;10UF,20%,16V,-,4X7MM,5,TP		
UC33	2401-001931	C-AL;220NF,20%,50V,-,4X7MM,5,TP		
UC10	2401-002180	C-AL;2.2UF,0.2,50V,GP,5X11,5MM,TP		
UC9	2409-000123	C-EDL;47000UF,4UA,5.5V,-,-,5MM,BK		B1104-0540
UX2	2801-001382	CRYSTAL-UNIT;12MHZ,50PPM,28-AAM,10P		A1280-0017
UX1	2801-001394	CRYSTAL-UNIT;32.768KHZ,20PPM,28-AAY		14539-502-350
USW1,2,3,4,5,6,7,8	3404-000165	SWITCH-TACT;12V,50MA,160GF+-50GF,6X		13559-901-100
USW9,10,11,12,13,14,15,16				
USW17,18,19,20,21,22,23				
USW24,25,26				
USW24,25,26				
USW27	3406-000162	SWITCH-ROTARY;5V,50MA,SPDT,20MM		A3012-0018
CCW1,2	3711-002581	CONNECTOR-HEADER;WALL,20P,1R,1.5MM,		
UIC5	AC14-12001G	IC;KA78L05,T,-		
VFD	AH07-20045B	VF-DISPLAY;SVA-16LL03,-,141.5X41.0,		
UIC1	AH11-10002F	IC-MASK ROM;LC86P6232,-,DIP		B4000-0017
FRONT PCB	AH41-10404A	PCB-FRONT;MAX650R/670R,1L,PHENOL,33		
REMOCON EYE	AH59-60001J	MODULE-REMOCON;GP1U271R,38KHZ,-,MES		B1294-0043
UD13	0402-000125	DIODE-RECTIFIER;1N4001,50V,1A,DO-41		A4104-0001
UQ3	0501-000407	TR-SMALL SIGNAL;-,NPN,800MW,TO-92,-		12149-401-150
UR44	2001-000449	R-CARBON;2.2KOHM,5%,1/8W,AA,TP,1.8X		11018-877-222
UC25	2203-000844	C-CERAMIC,CHIP;39NF,10%,50V,X7R,201		11129-019-393
UC27,28	2203-001619	C-CERAMIC,CHIP;27PF,5%,50V,NPO,2012		
UC26	2401-000244	C-AL;100UF,20%,10V,GP,6.3*7,2.5MM,T		11608-152-104
UX3	2802-000158	RESONATOR-CERAMIC;4MHZ,0.5%,TP,10.0		14534-504-043
UIC3	AH09-10060H	IC-MCU;MSM6656A-662RS,18P,DIP,8BITS		
UD5,8	0401-000101	DIODE-SWITCHING;1N4148,100V,200MA,5		

Loc No.	New Part No.	Description	Specification	Old Part No.
RC1,2	2201-000520	C-CERAMIC,DISC;4.7NF,+80-20%,400VAC		11469-501-070
FUSE1,3,4	3601-000248	FUSE-FERRULE;250V,2A,TIME LAG,GLASS		14709-241-250
RF1,3,4	3602-000147	FUSE-CLIP;250V,7.5A,30MOHM		13164-101-913
RCW3	3708-001044	CONNECTOR-FPC/FC/PIC;5P,1.5MM,STRAI		
RCW1	3711-000190	CONNECTOR-HEADER;1WALL,2P,1R,7.92MM		13349-156-020
RCW2	3711-000588	CONNECTOR-HEADER;BOX,10P,1R,2.5MM,S		13349-103-103
RJW1,9,11,5,8	3811-000389	WIRE-NO SHEATH CU;SPCW,300V,52.4MM,		
POWER TRANS	AH26-80140K	TRANS-POWER;EI85.8X57,115/230V,60/5		
RL1,2	AH27-10001F	COIL-CHOKE;27UH,K,Q30,-,-,DR(6.5*7.		12429-010-330
	AH90-10689A	ASSY-PCB MAIN;MAX670Z,CHN		
JD1L,1R,2L,2R,3L,3R CD2,3,4,6,7,8,LD1 UD1,2,3,4,6,JD5,6,RD9	0401-000101	DIODE-SWITCHING;1N4148,100V,200MA,5		
RD3,4,5,10,11	0402-000125	DIODE-RECTIFIER;1N4001,50V,1A,DO-41		A4104-0001
RD1,2	0402-000151	DIODE-RECTIFIER;1N5392,100V,1.5A,DO		12169-201-140
JZD1	0403-000358	DIODE-ZENER;UZ5.6BSB,5.6V,5.46-5.7V		12169-404-790
UZD1,2	0403-000367	DIODE-ZENER;UZ7.5BSC,7.5V,7.33-7.64		12169-404-820
RZD1,3	0403-000379	DIODE-ZENER;UZP12B,12V,11.4-12.6V,1		12169-403-910
RQ9,8	0501-000010	TR-SMALL SIGNAL;KSC1008-Y,NPN,80V,6		12149-301-050
LQ1,2,RQ4	0501-000369	TR-SMALL SIGNAL;-,NPN,1W,TO-92L,-,1		12149-301-910
LQ3,CQ11,12,UQ1 CQ5,10	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250MW,TO		12149-301-900
DQ5L,5R,UQ2,3,4,5	0501-000407	TR-SMALL SIGNAL;-,NPN,800MW,TO-92,-		12149-401-150
CQ1,6,8,3,UQ7	0501-000610	TR-SMALL SIGNAL;-,PNP,1W,TO-92L,TP,		
RQ2,7	0502-000424	TR-POWER;2SB1566-F,PNP,2W,TO-220FN,		B4052-0086
RQ3	0502-000425	TR-POWER;2SD2395-F,NPN,2W,TO-220FN,		B4052-0087
CQ2,4,7,9 DQ1L,1R,UQ8,DQ2,UQ9	0504-000118	TR-DIGITAL;-,NPN,300MW,22K-22K,TO-9		12159-301-780
JQ4L,4R,DQ6L,6R	0504-000122	TR-DIGITAL;-,NPN,300MW,4.7K,TO-92,T		12159-301-790
JQ5,DQ3,4,7,8	0504-001003	TR-DIGITAL;KSR2003,PNP,300MW,22K-22		
JQ2L,2R	0505-000197	FET-SILICON;2SK373Y,N,-,-,-,400MW,T		B4054-0023
DIC2	1001-000111	IC-ANALOG SWITCH;GD4066B,BILATERAL		
UIC4	1003-000293	IC-MOTOR DRIVER;LB1649,DIP,14P,-,-,		
UIC3	1103-001006	IC-EEPROM;93LC46,64X16BIT,DIP,8P,30		
DIC3	1201-000192	IC-OP AMP;4558,SIP,9P,-,DUAL,20V/MV		12119-401-630
JIC1	1201-000364	IC-PREAMP;3442A,QFP,56P,-,DUAL,-,PL		B4012-0417
RIC3	1203-000242	IC-POSI.FIXED REG.;7812,TO-220,3P,-		12109-401-690
RIC4	1203-000276	IC-POSI.FIXED REG.;7805,TO-220,3P,-		12119-601-770
RIC2	1203-000282	IC-POSI.FIXED REG.;7806,TO-220,3P,-		12119-601-830
RIC1	1203-000294	IC-POSI.FIXED REG.;7808,TO-220,3P,-		12109-401-730
DIC1	1204-000134	IC-DNR PROCESSOR;KA2271B,DIP,16P,-,		12109-323-990
LR1	2001-000005	R-CARBON;390OHM,5%,1/8W,AA,TP,1.8X3		11018-877-391
JR9	2001-000008	R-CARBON;15KOHM,5%,1/8W,AA,TP,1.8X3		11018-877-153
UR104	2001-000019	R-CARBON(S);10OHM,5%,1/2W,AA,TP,2.4		11018-377-100
JR1L,1R,UR9,DR2,7 DR22L,22R	2001-000273	R-CARBON;100KOHM,5%,1/8W,AA,TP,1.8X		11018-877-104
JR14,DR13,19,25,24,27	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3		11018-877-101
CR1,2,9,18,19,10 CR16,20,21,UR2,3,4,JR27	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3		11018-877-103

Loc No.	New Part No.	Description	Specification	Old Part No.
LR3,DR3,14,JR29				
CR5,LR6L,6R,JR16				
DR15L,15R,JR12L	2001-000331	R-CARBON;12KOHM,5%,1/8W,AA,TP,1.8X3		11018-877-123
JR17,18,21L,21R,UR63,64	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.		11018-877-102
UR100,101,102,103				
UR95,96,97,98				
UR113,114,115,116,117				
UR5,8,DR23L,23R	2001-000449	R-CARBON;2.2KOHM,5%,1/8W,AA,TP,1.8X		11018-877-222
DR20L,20R,21L,21R				
JR24	2001-000454	R-CARBON;2.2MOHM,5%,1/8W,AA,TP,1.8X		11018-877-225
LR4	2001-000456	R-CARBON;2.2OHM,5%,1/4W,AA,TP,2.4X6		11018-277-229
JR4L,4R	2001-000472	R-CARBON;2.7KOHM,5%,1/8W,AA,TP,1.8X		11018-877-272
UR1	2001-000508	R-CARBON;220KOHM,5%,1/8W,AA,TP,1.8X		11018-877-224
JR7L,7R,RR11	2001-000522	R-CARBON;22KOHM,5%,1/8W,AA,TP,1.8X3		11018-877-223
UR91,92,93,94	2001-000591	R-CARBON;3.3KOHM,5%,1/8W,AA,TP,1.8X		11018-877-332
JR8L,8R,CR7,8,14	2001-000613	R-CARBON;3.9KOHM,5%,1/8W,AA,TP,1.8X		11018-877-392
CR15				
DR6L,6R,JR15	2001-000660	R-CARBON;33OHM,5%,1/8W,AA,TP,1.8X3.		11018-877-333
DR8	2001-000702	R-CARBON;39KOHM,5%,1/8W,AA,TP,1.8X3		11018-877-393
CR6,17,22,JR19,20,LR5	2001-000734	R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X		11018-877-472
DR10L,10R,4L,4R				
UR81,82,84,86,87,88				
UR90,99,RR1,2,8				
CR13				
DR12,18L,18R	2001-000786	R-CARBON;47KOHM,5%,1/8W,AA,TP,1.8X3		11018-877-473
UR83,85,89				
UR83,85,89				
DR1R,JR6L,6R,25	2001-000812	R-CARBON;5.6KOHM,5%,1/8W,AA,TP,1.8X		11018-877-562
DR5L,5R,1L,11				
LR2	2001-000857	R-CARBON;560OHM,5%,1/8W,AA,TP,1.8X3		11018-877-561
JR28	2001-000869	R-CARBON;56OHM,5%,1/8W,AA,TP,1.8X3.		11018-877-560
JR22L,22R	2001-000890	R-CARBON;6.8KOHM,5%,1/8W,AA,TP,1.8X		11018-877-682
UR6	2001-000894	R-CARBON;6.8OHM,5%,1/8W,AA,TP,1.8X3		11018-877-689
RR5	2001-000975	R-CARBON;8.2KOHM,5%,1/4W,AA,TP,2.4X		11018-277-822
JR10L,11L	2001-000977	R-CARBON;8.2KOHM,5%,1/8W,AA,TP,1.8X		11018-877-822
JR2L,2R	2001-000995	R-CARBON;820OHM,5%,1/8W,AA,TP,1.8X3		11018-877-821
JR3L,3R	2001-001006	R-CARBON;82OHM,5%,1/8W,AA,TP,1.8X3.		11018-877-820
JR26	2001-001077	R-CARBON(S);150OHM,5%,1/2W,AA,TP,2.		11018-377-151
RR4	2001-001138	R-CARBON(S);390OHM,5%,1/2W,AA,TP,2.		11018-377-391
UR104	2001-001146	R-CARBON(S);4.7OHM,5%,1/2W,AA,TP,2.		11018-377-479
CR3,4,11,12,UR62	2001-001178	R-CARBON(S);680OHM,5%,1/2W,AA,TP,2.		11018-377-681
PR9	2003-000473	R-METAL OXIDE(S);10OHM,5%,3W,AA,TP,		
RR13,10	2003-000479	R-METAL OXIDE(S);120OHM,5%,1W,AA,TP		11048-477-121
RR3,6	2003-000534	R-METAL OXIDE(S);1KOHM,5%,1W,AA,TP,		11048-477-102
RR7	2003-000554	R-METAL OXIDE(S);2.2OHM,5%,1W,AA,TP		11048-477-229
LSR1L,1R	2103-000122	VR-SEMI;100KOHM,30%,1/10W,TOP		11249-102-074
JSR1R,2R	2103-000290	VR-SEMI;20KOHM,30%,1/10W,TOP		11249-102-044
CSR1,2	2103-000341	VR-SEMI;2KOHM,30%,1/10W,TOP		11249-102-104
JSR3R	2103-000461	VR-SEMI;50KOHM,30%,1/10W,TOP		11249-102-064
JC8L,8R	2201-000202	C-CERAMIC,DISC;10PF,5%,50V,NPO,5.0X		11407-057-100

Loc No.	New Part No.	Description	Specification	Old Part No.
JC5L,5R	2201-000300	C-CERAMIC,DISC;1NF,20%,50V,Y5T,4X4,		11417-329-102
LC1L,1R	2201-000368	C-CERAMIC,DISC;220PF,10%,50V,SL,6.5		11407-018-221
JC7R	2201-000381	C-CERAMIC,DISC;22NF,20%,50V,Y5V,8.0		11417-344-223
UC5,6	2201-000426	C-CERAMIC,DISC;27PF,5%,50V,SL,4X3.5		11407-017-270
RC1	2201-000520	C-CERAMIC,DISC;4.7NF,+80-20%,400VAC		11469-501-070
JC1L,1R	2201-000601	C-CERAMIC,DISC;560PF,10%,50V,Y5P,5.		11417-318-561
CC3	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5		
UC16	2202-000806	C-CERAMIC,MLC-AXIAL;220PF,10%,50V,Y		11449-518-221
JC7L	2202-000807	C-CERAMIC,MLC-AXIAL;22NF,+80-20%,25		11448-010-223
UC3	2202-000854	C-CERAMIC,MLC-AXIAL;47NF,0.3,50V,Y5		
JC3L,4L,4R	2203-002208	C-CERAMIC,CHIP;330PF,0.1,50V,Y5P,20		
JC10L,10R,25L,25R	2301-000361	C-FILM,PEF;1.2NF,10%,50V,-,5MM,TP		
JC18L,18R,LC2	2301-000365	C-FILM,PEF;1.5NF,10%,50V,5.5X7X2.8M		
LC4	2301-000390	C-FILM,PEF;15NF,10%,50V,6.5X9X3.5MM		
LC5	2301-000404	C-FILM,PEF;2.2NF,10%,50V,5.5X7X3.2M		
JC17L,17R	2301-000412	C-FILM,PEF;22NF,10%,50V,6.5X10.5X4M		
JC27L,27R	2301-000422	C-FILM,PEF;3.3NF,10%,50V,5.5X7X3MM,		
JC13	2401-000240	C-AL;100UF,20%,10V,GP,6*11MM,5MM,TP		11608-102-104
RC11	2401-000303	C-AL;100UF,20%,25V,GP,6.3*11,2.5MM,		11608-104-104
JC16L,16R,RC5,DC17	2401-000419	C-AL;10UF,20%,16V,GP,5X11,5,-		
UC2,7	2401-000475	C-AL;10UF,20%,50V,GP,5*11,2MM,		11608-106-100
RC14	2401-000847	C-AL;220UF,20%,35V,GP,10X12MM,5MM,T		11608-105-221
RC3,6	2401-001364	C-AL;470UF,20%,16V,GP,10X12MM,5MM,T		11608-103-471
JC14	2401-001465	C-AL;47UF,20%,10V,GP,5*11,2MM,		11608-102-473
DC7,8,UC1	2401-001645	C-AL;680NF,20%,50V,GP,5*11,2MM,		11608-106-688
JC20,DC14,15,CC1	2401-001895	C-AL;100UF,20%,16V,GP,6.3X11MM,2.5M		
UC9,DC16				
JC23	2401-001912	C-AL;1UF,20%,50V,GP,5X11MM,2MM,BK		
JC24L,24R,DC13L,13R	2401-001954	C-AL;4.7UF,20%,50V,GP,5X11MM,5,TP		
RC2	2401-001959	C-AL;4700UF,20%,25V,GP,18X35.5MM,7.		A1104-0270
LC3,7	2401-001975	C-AL;47UF,20%,16V,GP,5X11MM,5,TP		
JC9L,9R,11L,11R,12L,12R	2401-002180	C-AL;2.2UF,0.2,50V,GP,5X11,5MM,TP		
JC15L,15R,DC1L,1R,2L,2R				
DC5L,5R,6L,6R,12L,12R				
UC8,JC22				
JC19,DC3,9	2401-002183	C-AL;220UF,0.2,16V,GP,8X9,5MM,TP		
RC9				
LL1	2701-000116	INDUCTOR-AXIAL;10UH,10%,4.2X9.8MM		12429-508-100
UX1	2801-001382	CRYSTAL-UNIT;12MHZ,50PPM,28-AAM,10P		A1280-0017
JLPF1L,1R	2909-000210	FILTER-LC;LP,-,1DB,30DB/19KHZ,50DB/		14529-414-050
RFS1,2	3601-000249	FUSE-FERRULE;250V,2A,TIME LAG,GLASS		B3065-0108
RFS1,2	3602-000147	FUSE-CLIP;250V,7.5A,30MOHM		13164-101-913
CFW1	3708-000152	CONNECTOR-FPC/FC/PIC;13P,1.25MM,STR		B6010-0794
CFW3	3708-000274	CONNECTOR-FPC/FC/PIC;34P,1.25MM,STR		B6010-0881
1 DECK	3708-000446	CONNECTOR-FPC/FC/PIC;11P,1.5MM,STRA		B6010-1547
2 DECK	3708-000447	CONNECTOR-FPC/FC/PIC;13P,1.5MM,STRA		B6010-0399
CCW2	3708-001028	CONNECTOR-FPC/FC/PIC;18P,1.25MM,STR		
CFW2	3708-001029	CONNECTOR-FPC/FC/PIC;9P,1.25MM,STRA		
CSW1	3710-000521	CONNECTOR-SOCKET;20P,-,1.5MM,-,SN		B6010-1816
P/B HEAD	3711-000903	CONNECTOR-HEADER;BOX,3P,1R,2.5MM,ST		13349-527-502

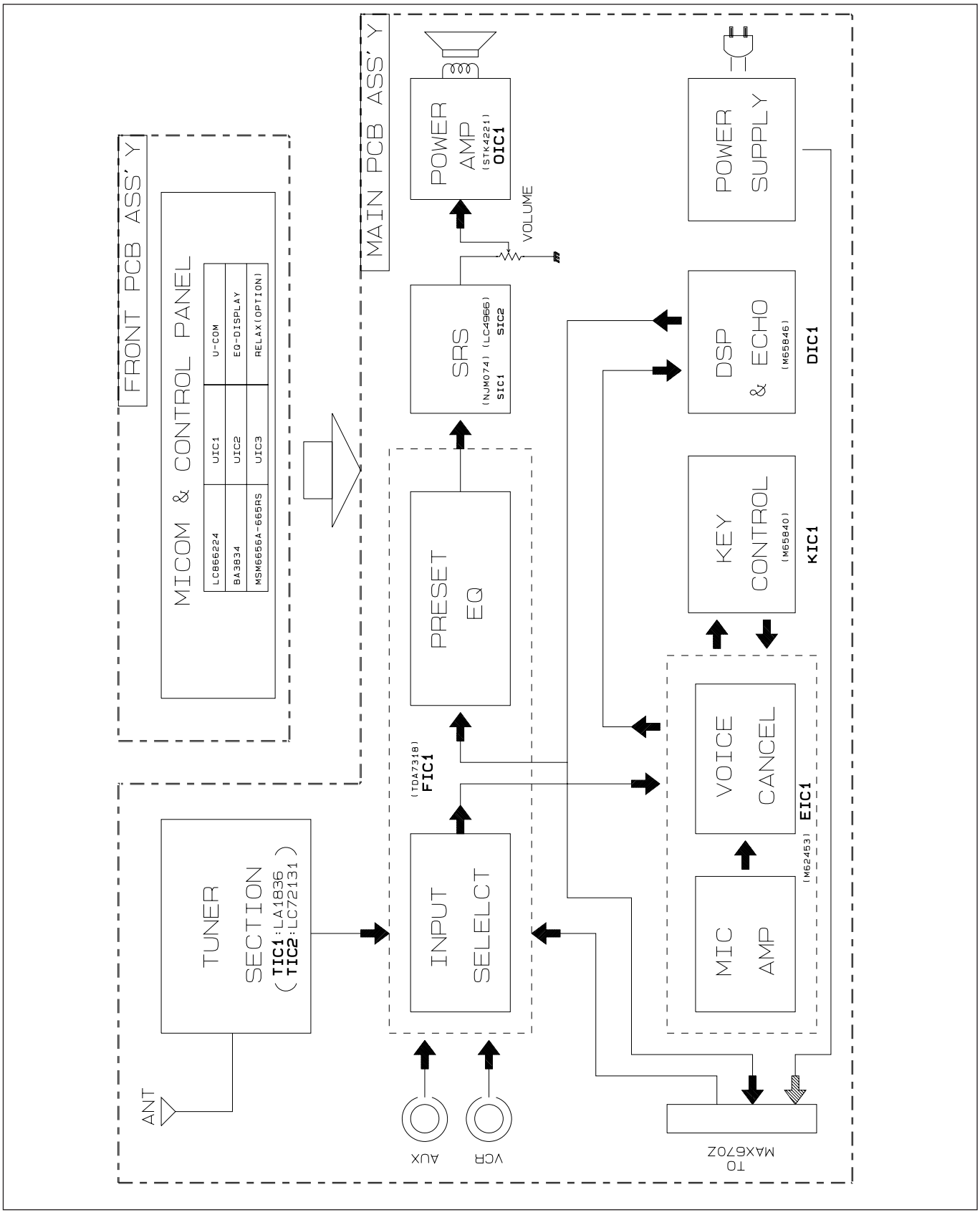
Loc No.	New Part No.	Description	Specification	Old Part No.
BIAS,LEVEL,SIGNAL	3711-000907	CONNECTOR-HEADER;BOX,3P,1R,2MM,STRA		13349-119-030
R/P HEAD	3711-001011	CONNECTOR-HEADER;BOX,5P,1R,2.5MM,ST		13349-103-053
CFN3	3809-000183	CABLE-FLAT;30V,80C,300MM,34P,1.25MM		A6032-0054
CCN1	3809-000203	CABLE-FLAT;30V,80C,300MM,16P,1.25MM		A6032-0085
CCN2	3809-001009	CABLE-FLAT;30V,80C,250MM,18P,1.25MM		
CCN1	3809-001010	CABLE-FLAT;30V,80C,300MM,12P,1.25MM		
UIC1	AH09-10060C	IC-MCU;LC866224-XXXX,100P,QFP,-		
JIC2,UIC2	AH14-10007D	IC;NJU3716M,SOP,STICK EXPANDER 16BI		
JLPF2L,2R,3L,3R	AH26-10002X	COIL-TRAP;KS940830-05,BIAS-TRAP,30D		12429-206-102
LL2	AH26-10003C	COIL-TRAP;PCHNS-5371EQJ,BIAS-TRAP,-		12619-577-771
CDN1	AH39-20022G	LEAD-CONNECTOR ASS'Y;51004,5295,8P,		16439-0204-00
H/SINK	AH62-30112A	HEAT SINK-TR;-,ALS,-,T4.0,BLK ANODI		
CCW1	B6010-1502	CONNECTOR-FPC;52045-1245 GRY J/MOLE		
AH90-10690A	ASSY-PCB FRONT;MAX670Z,CHN			
UQ6	0501-000407	TR-SMALL SIGNAL;-,NPN,800MW,TO-92,-		12149-401-150
ULD12,13	0601-000245	LED;ROUND,RED,3.1MM,650NM		12309-001-450
ULD16,17,18,19,20,21	0601-001051	LED;ROUND,GRN/RED,3.2MM,563/650NM		
ULD22,23,24,25,26,27				
ULD28,29,11,30				
ULD1,2,3,5,7,9,14,15				
ULD4,6,8,10				
UR27,33,41	2001-000221	R-CARBON;1.2KOHM,5%,1/8W,AA,TP,1.8X		11018-877-122
UR22				
UR28,34,42,43,35	2001-000241	R-CARBON;1.5KOHM,5%,1/8W,AA,TP,1.8X		11018-877-152
UR49	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3		11018-877-103
UR11,14,16,17,105,108	2001-000362	R-CARBON;150OHM,5%,1/8W,AA,TP,1.8X3		11018-877-151
UR106,107,60				
UR12,13,15,18,109,110	2001-000405	R-CARBON;180OHM,5%,1/8W,AA,TP,1.8X3		
UR111,112,61				
UR32,40,26	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.		11018-877-102
UR36,44	2001-000449	R-CARBON;2.2KOHM,5%,1/8W,AA,TP,1.8X		11018-877-222
UR45,59	2001-000472	R-CARBON;2.7KOHM,5%,1/8W,AA,TP,1.8X		11018-877-272
UR19	2001-000515	R-CARBON;220OHM,5%,1/8W,AA,TP,1.8X3		11018-877-221
UR50,51	2001-000522	R-CARBON;22KOHM,5%,1/8W,AA,TP,1.8X3		11018-877-223
UR20,21	2001-000554	R-CARBON;270OHM,5%,1/8W,AA,TP,1.8X3		11018-877-271
UR46	2001-000613	R-CARBON;3.9KOHM,5%,1/8W,AA,TP,1.8X		11018-877-392
UR65,66,67,68,69,70,71	2001-000734	R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X		11018-877-472
UR72,73,74,75,76,77				
UR78,79,80				
UR52,53,54,55,56,57,58	2001-000793	R-CARBON;47OHM,5%,1/8W,AA,TP,1.8X3.		11018-877-470
UR47,62	2001-000812	R-CARBON;5.6KOHM,5%,1/8W,AA,TP,1.8X		11018-877-562
UR23,29,37	2001-000857	R-CARBON;560OHM,5%,1/8W,AA,TP,1.8X3		11018-877-561
UR6,10	2001-000869	R-CARBON;56OHM,5%,1/8W,AA,TP,1.8X3.		11018-877-560
UR48	2001-000890	R-CARBON;6.8KOHM,5%,1/8W,AA,TP,1.8X		11018-877-682
UR24,30,38	2001-000924	R-CARBON;680OHM,5%,1/8W,AA,TP,1.8X3		11018-877-681
UR25,31,39	2001-000995	R-CARBON;820OHM,5%,1/8W,AA,TP,1.8X3		11018-877-821
USW1,2,3,4,5,6,7	3404-000165	SWITCH-TACT;12V,50MA,160GF+-50GF,6X		13559-901-100
USW8,9,10,11,12,13,14				
USW15,16,17,18,20,21				

Loc No.	New Part No.	Description	Specification	Old Part No.
USW22,23,24,25,26,27,28				
USW29,30,31,33				
USW19,32				
CFW4,4-1	3708-000104	CONNECTOR-FPC/FC/PIC;10P,1.25MM,ANG		B6010-0718
CFW1-1	3708-000149	CONNECTOR-FPC/FC/PIC;13P,1.25MM,N,P		B6010-0793
CFW3-1	3708-000272	CONNECTOR-FPC/FC/PIC;34P,1.25MM,ANG		B6010-0880
CFW2-1	3708-000492	CONNECTOR-FPC/FC/PIC;9P,1.25MM,-,SN		B6010-1817
CFN1	3809-001007	CABLE-FLAT;30V,80C,200MM,13P,1.25MM		
CFN2	3809-001008	CABLE-FLAT;30V,80C,150MM,9P,1.25MM,		
CFN4	3809-001011	CABLE-FLAT;30V,80C,80MM,10P,1.25MM,		
VFD	AH07-20002Q	V.F.DISPLAY;SVA-16SS04,-,-,AUDIO		A4153-0116
FLT-HOLDER	AH61-20057A	HOLDER-FL;ABS,94HB,BLK,-,MQ460R,		13322-0017-00
G3A1-6NC		**CD PACK ASSY;MAX670Z/CKD**		
	6003-000276	SCREW-TAPTITE;BH,+,B,M3,L10,ZPC(YEL		17458-230-101
WCW5	AH39-20504A	LEAD CONNECTOR-ASSY;-,51004,PHR,6P,		
SW4	AH39-20505A	LEAD CONNECTOR-ASSY;-,51004,GT201,8		
SW3	AH39-20506A	LEAD CONNECTOR-ASSY;-,51004,GT201,8		
AH90-10320E		**ASSY-PCB SUB;MAX-670Z,G3A1**		
SW3,4	3711-001136	CONNECTOR-HEADER;BOX,8P,1R,2MM,ANGL		13349-139-080
SW1,2	3711-003162	CONNECTOR-HEADER;NOWALL,8P,1R,2.0MM		
SUB PCB	AH41-10411A	PCB-SUB();G3A1,1L,FR-1,163X163X1.		
AH90-10716Q		**ASSY-PCB ;MAX670Z,G3A1/CKD**		
WQ2	0501-000323	TR-SMALL SIGNAL;-,PNP,800MW,TO-92,T		12149-202-050
WQ5	0501-000610	TR-SMALL SIGNAL;-,PNP,1W,TO-92L,TP,		
WIC02	0904-000158	IC-DSP;9283,-,QFP,80P,-,16.9344MHZ,		A4012-0292
XIC01	1002-000169	IC-D/A CONVERTER;PCM1710U,16BIT,SOP		B4012-0381
WIC03	1003-000179	IC-MOTOR DRIVER;KA9258D,SOP,28P,-,S		
XIC02	1201-000214	IC-OP AMP;2100,SOP,8P,-,DUAL,80V/MV		B4008-1206
WIC01	1204-001041	IC-ASP;KA9220B,QFP,80P,-,PLASTIC,6V		
WJW1,2,3,4,5,6,8,WR20	2007-000029	R-CHIP;0OHM,5%,1/10W,DA,TP,2012		11119-101-000
WR1	2007-000068	R-CHIP;470KOHM,5%,1/10W,DA,TP,2012		11119-101-474
XR2L,2R	2007-000267	R-CHIP;1.8KOHM,5%,1/10W,DA,TP,2012		11119-101-182
WR2,9,18,28,XR4L,4R	2007-000282	R-CHIP;100KOHM,5%,1/10W,DA,TP,2012		11119-101-104
WR36	2007-000300	R-CHIP;10KOHM,5%,1/10W,DA,TP,2012		11119-101-103
WR12,16	2007-000338	R-CHIP;120KOHM,5%,1/10W,DA,TP,2012		11119-101-124
WR8,22,23,24	2007-000355	R-CHIP;12KOHM,5%,1/10W,DA,TP,2012		11119-101-123
WR3,33	2007-000395	R-CHIP;150KOHM,5%,1/10W,DA,TP,2012		11119-101-154
WR14	2007-000409	R-CHIP;15KOHM,5%,1/10W,DA,TP,2012		11119-101-153
WR5	2007-000444	R-CHIP;180KOHM,5%,1/10W,DA,TP,2012		11119-101-184
WR10,19,27	2007-000468	R-CHIP;1KOHM,5%,1/10W,DA,TP,2012		11119-101-102
WR6	2007-000477	R-CHIP;1MOHM,5%,1/10W,DA,TP,2012		11119-101-105
XR8,9	2007-000490	R-CHIP;2.2KOHM,1%,1/10W,DA,TP,2012		A1020-0376
WR34	2007-000586	R-CHIP;22KOHM,5%,1/10W,DA,TP,2012		11119-101-223
WR25	2007-000593	R-CHIP;22OHM,5%,1/10W,DA,TP,2012		11119-101-220
WR29	2007-000635	R-CHIP;270KOHM,5%,1/10W,DA,TP,2012		11119-101-274
WR30	2007-000653	R-CHIP;27KOHM,5%,1/10W,DA,TP,2012		11119-101-273
WR31,32	2007-000686	R-CHIP;3.3KOHM,5%,1/10W,DA,TP,2012		11119-101-332

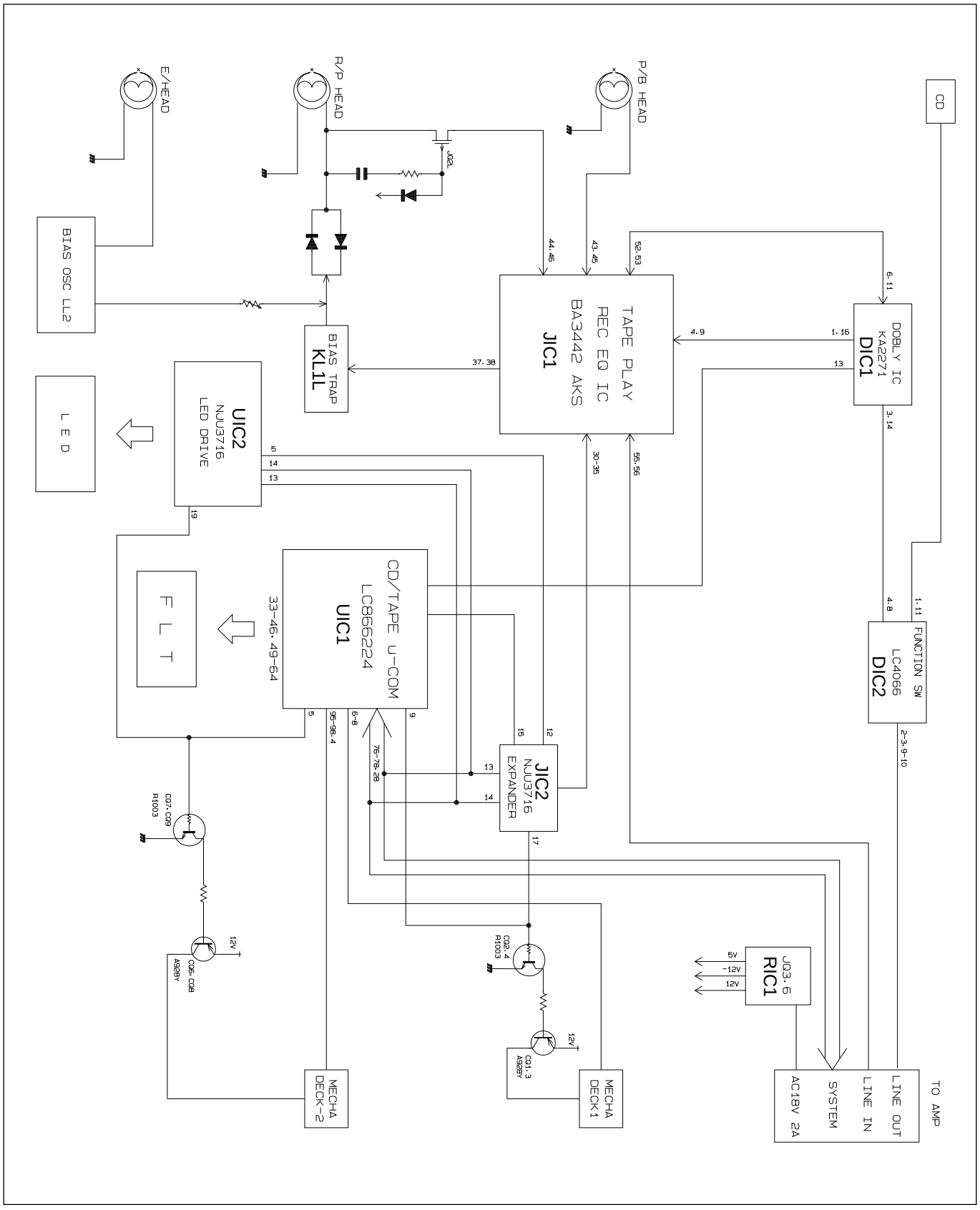
Loc No.	New Part No.	Description	Specification	Old Part No.
XR1L,1R,3L,3R,WR21	2007-000872	R-CHIP;4.7KOHM,5%,1/10W,DA,TP,2012		11119-101-472
WR11,15	2007-000941	R-CHIP;47KOHM,5%,1/10W,DA,TP,2012		11119-101-473
WR13	2007-001039	R-CHIP;56KOHM,5%,1/10W,DA,TP,2012		11119-101-563
WR17	2007-001130	R-CHIP;68KOHM,5%,1/8W,DA,TP,3216		11118-201-683
WR7	2007-001177	R-CHIP;8.2KOHM,5%,1/10W,DA,TP,2012		11119-101-822
WR4	2007-001195	R-CHIP;820KOHM,5%,1/10W,DA,TP,2012		11119-101-824
WR26	2007-001213	R-CHIP;82OHM,1%,1/10W,DA,TP,2012		11119-102-820
WR35	2008-000141	R-FUSIBLE;2.2OHM,5%,1/4W,AA,TP,2.6X		11058-277-229
WVR1,2,3,4	2103-000291	VR-SEMI;20KOHM,30%,1/10W,SIDE		11249-102-043
WC3,4,5,20,22,31,41,42	2203-000199	C-CERAMIC,CHIP;100NF,+80-20%,50V,Z5		
WC1,2,10,19,32,33,34,40	2203-000260	C-CERAMIC,CHIP;10NF,10%,50V,X7R,201		11129-004-103
WC13	2203-000417	C-CERAMIC,CHIP;18NF,10%,50V,X7R,201		11129-004-183
XC9	2203-000477	C-CERAMIC,CHIP;1UF,+80-20%,16V,Y5V,		A1100-0630
WC18,21	2203-000495	C-CERAMIC,CHIP;2.2NF,10%,50V,X7R,20		11129-004-222
WC7,28,XC10	2203-000802	C-CERAMIC,CHIP;33NF,10%,50V,X7R,201		11129-001-333
WC35,36	2203-000818	C-CERAMIC,CHIP;33PF,5%,50V,NPO,2012		11129-008-330
WC14	2203-000840	C-CERAMIC,CHIP;390PF,5%,50V,NPO,201		
WC23	2203-000892	C-CERAMIC,CHIP;4.7NF,10%,50V,X7R,20		
WC8,9,15,43	2203-000925	C-CERAMIC,CHIP;470NF,+80-20%,50V,Y5		11128-018-474
WC17,30	2203-000979	C-CERAMIC,CHIP;47NF,10%,50V,X7R,201		
WC24	2203-001026	C-CERAMIC,CHIP;4PF,0.25PF,50V,SL,20		
XC6L,6R	2203-001036	C-CERAMIC,CHIP;5.6NF,10%,50V,X7R,20		
WC16	2203-001105	C-CERAMIC,CHIP;6.8NF,10%,50V,X7R,20		11129-004-682
WC11	2203-001137	C-CERAMIC,CHIP;68NF,+80-20%,50V,Y5V		11129-004-683
XC7L,7R	2203-001230	C-CERAMIC,CHIP;820PF,5%,50V,NPO,201		A1100-0760
WC25	2203-001256	C-CERAMIC,CHIP;8PF,0.25PF,50V,NPO,2		
WC27	2203-001537	C-CERAMIC,CHIP;1NF,10%,50V,X7R,2012		
WC29	2203-001551	C-CERAMIC,CHIP;1.5NF,10%,50V,X7R,20		
WC26,37,XC1	2401-000243	C-AL;100UF,20%,10V,GP,6.3*5,2.5MM,T		11608-152-101
WC12	2401-000419	C-AL;10UF,20%,16V,GP,5X11,5,-		
WC39	2401-000778	C-AL;220UF,20%,10V,GP,6.3X11,2.5MM,		11608-102-224
WC38	2401-000868	C-AL;220UF,20%,4V,GP,6.3*5,2.5MM,TP		11608-171-221
XC8L,8R	2401-001238	C-AL;4.7UF,20%,25V,GP,3*5,1MM,TP		11608-154-479
XC5L,5R	2404-000120	C-TA,CHIP;10UF,20%,10V,-,3528,-,TP		11156-201-106
XC3,4,WC45	2404-000175	C-TA,CHIP;2.2UF,20%,6.3V,-,3216,1.1		11152-108-229
XC2,WC6	2404-000367	C-TA,CHIP;4.7UF,20%,6.3V,-,3216,-,		B1106-0274
WL1	2703-000002	INDUCTOR-SMD;100UH,10%,2.5X3.2X2MM		11176-600-040
XX1	2802-000211	RESONATOR-CERAMIC;16.93MHZ,0.5%,TP,		14539-503-083
WB2	3301-000325	CORE-FERRITE BEAD;AB,3.2X2.5X1.3MM,		B1144-0034
WCW2	3708-000412	CONNECTOR-FPC/FC/PIC;12P,1.25MM,ANG		A6010-1526
WCW5	3711-001061	CONNECTOR-HEADER;BOX,6P,1R,2MM,ANGL		13349-139-061
WCW1	3711-001136	CONNECTOR-HEADER;BOX,8P,1R,2MM,ANGL		13349-139-080
XIC03	AC14-12001G	IC;KA78L05,T,-		
WIC03	AH62-30047A	HEAT SINK;ETHD,-,T0.5,-,-,-,MAX-555		11124-0061-00
SHILD PLATE	AH63-40019A	SHIELD-PLATE;SPTE,T0.3,-,G3A1,-,		12074-0029-00

9. Block Diagrams

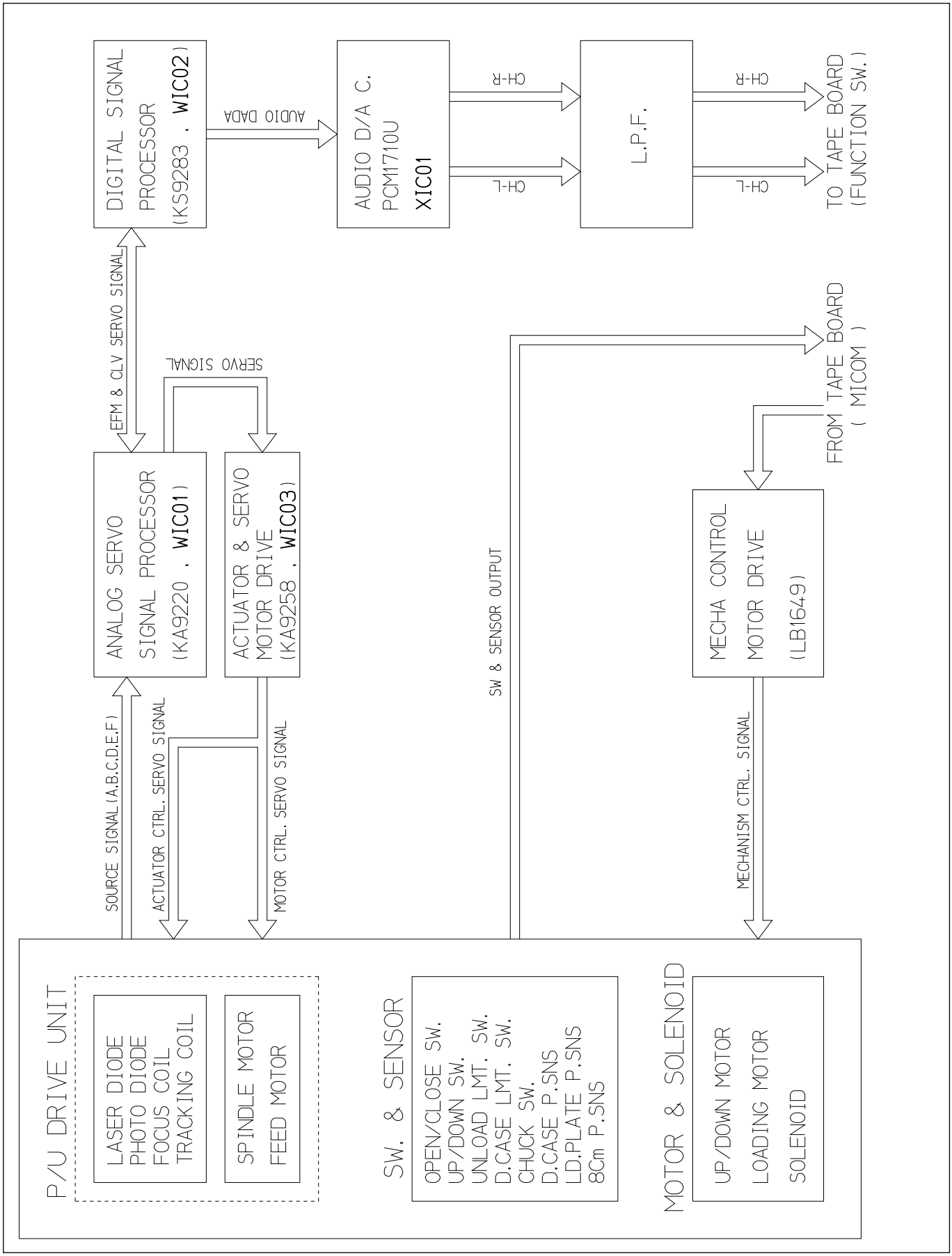
9-1 Amp and Tuner



9-2 Cassette Deck



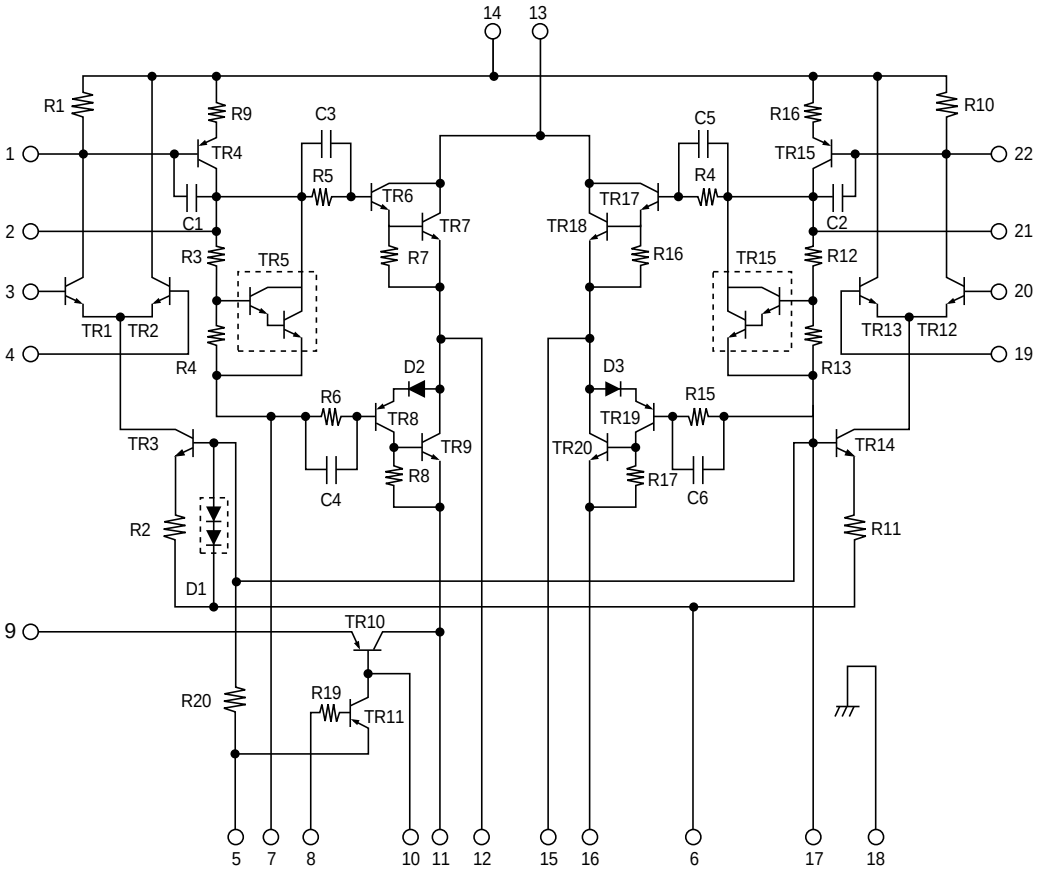
9-3 CD


DIGITAL SIGNAL PROCESSOR (KS9283 , WIC02)
AUDIO DATA
AUDIO D/A C. PCM1710U XIC01
CH-R
CH-L
L.P.F.
CH-R
CH-L
TO TAPE BOARD (FUNCTION SW.)
EFM & CLV SERVO SIGNAL
SERVO SIGNAL
ANALOG SERVO SIGNAL PROCESSOR (KA9220 , WIC01)
ACTUATOR & SERVO MOTOR DRIVE (KA9258 , WIC03)
FROM TAPE BOARD (MICOM)
SW & SENSOR OUTPUT
MECHA CONTROL MOTOR DRIVE (LB1649)
SOURCE SIGNAL(A,B,C,D,E,F)
ACTUATOR CTRL. SERVO SIGNAL
MOTOR CTRL. SERVO SIGNAL
MECHANISM CTRL. SIGNAL
P/U DRIVE UNIT
LASER DIODE
PHOTO DIODE
FOCUS COIL
TRACKING COIL
SPINDLE MOTOR
FEED MOTOR
SW. & SENSOR
OPEN/CLOSE SW.
UP/DOWN SW.
UNLOAD LMT. SW.
D.CASE LMT. SW.
CHUCK SW.
D.CASE P.SNS
LD.PLATE P.SNS
8Cm P.SNS
MOTOR & SOLENOID
UP/DOWN MOTOR
LOADING MOTOR
SOLENOID

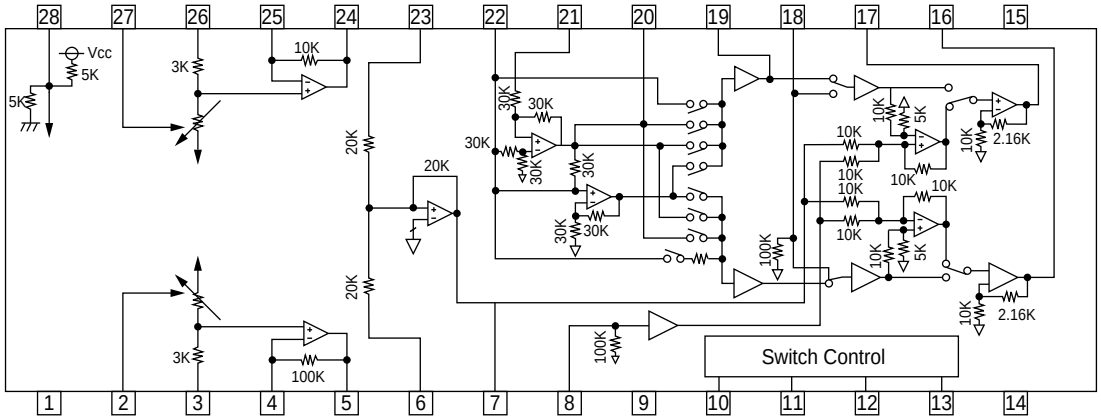
9-4 IC & TR Internal Diagrms

9-4-1 Amp and Tuner Section

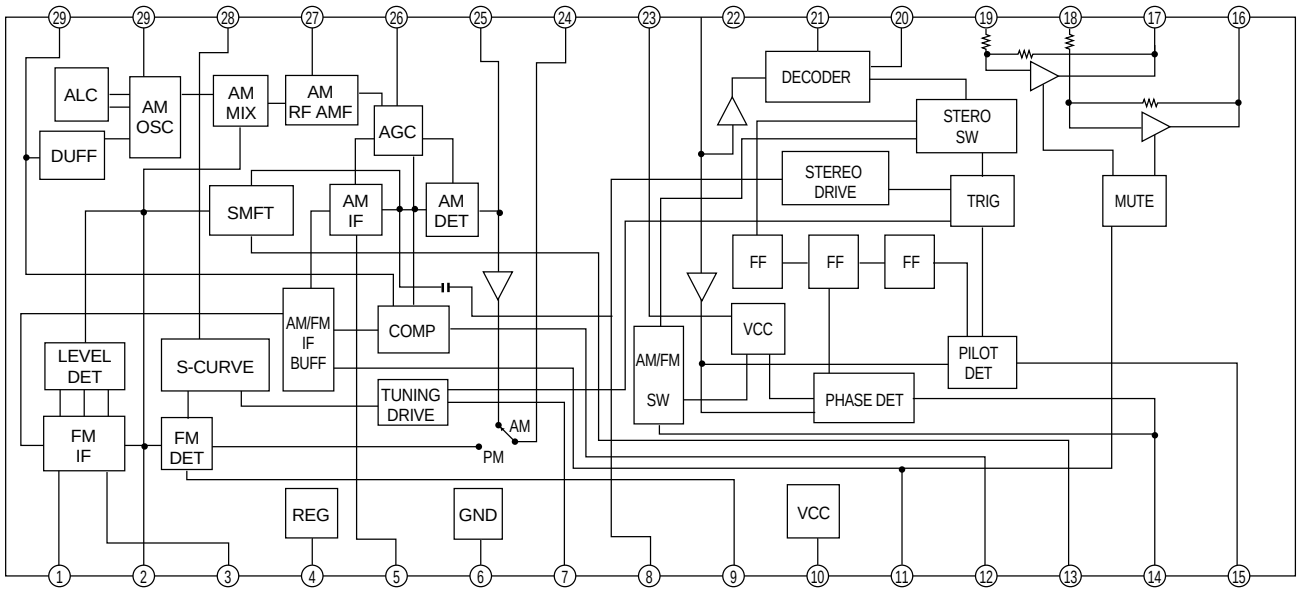
STK4221-II : OIC1



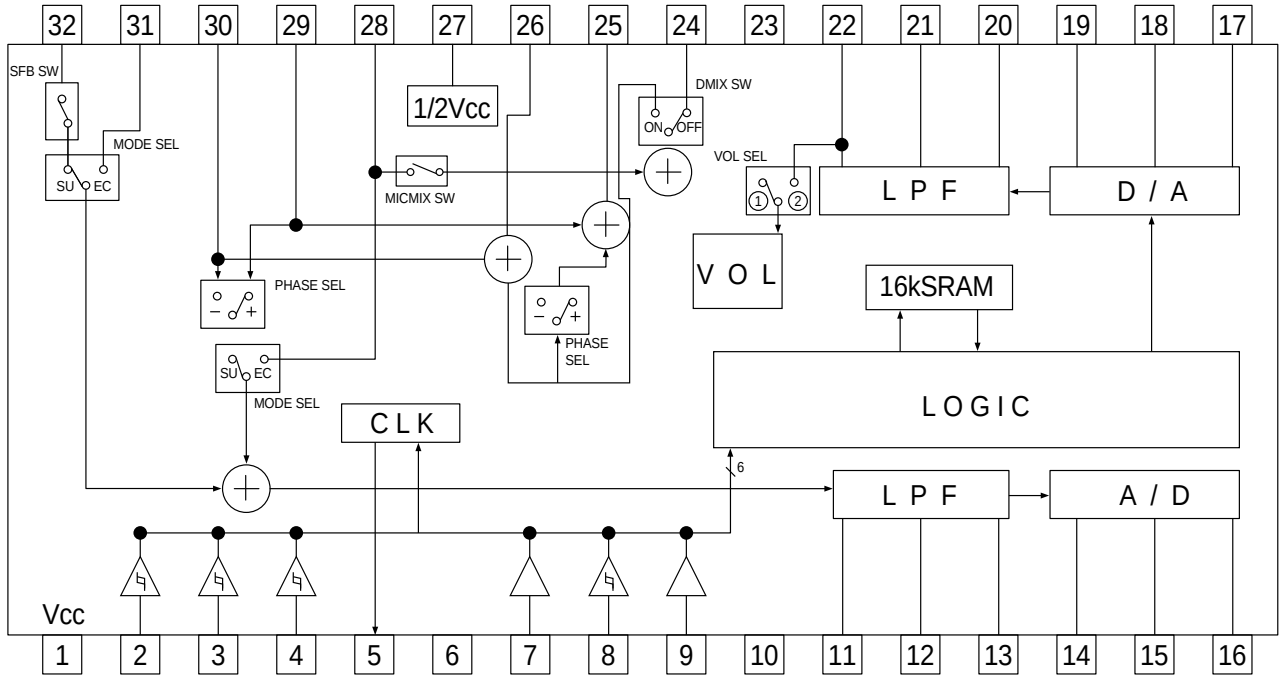
M62453SP : EIC1



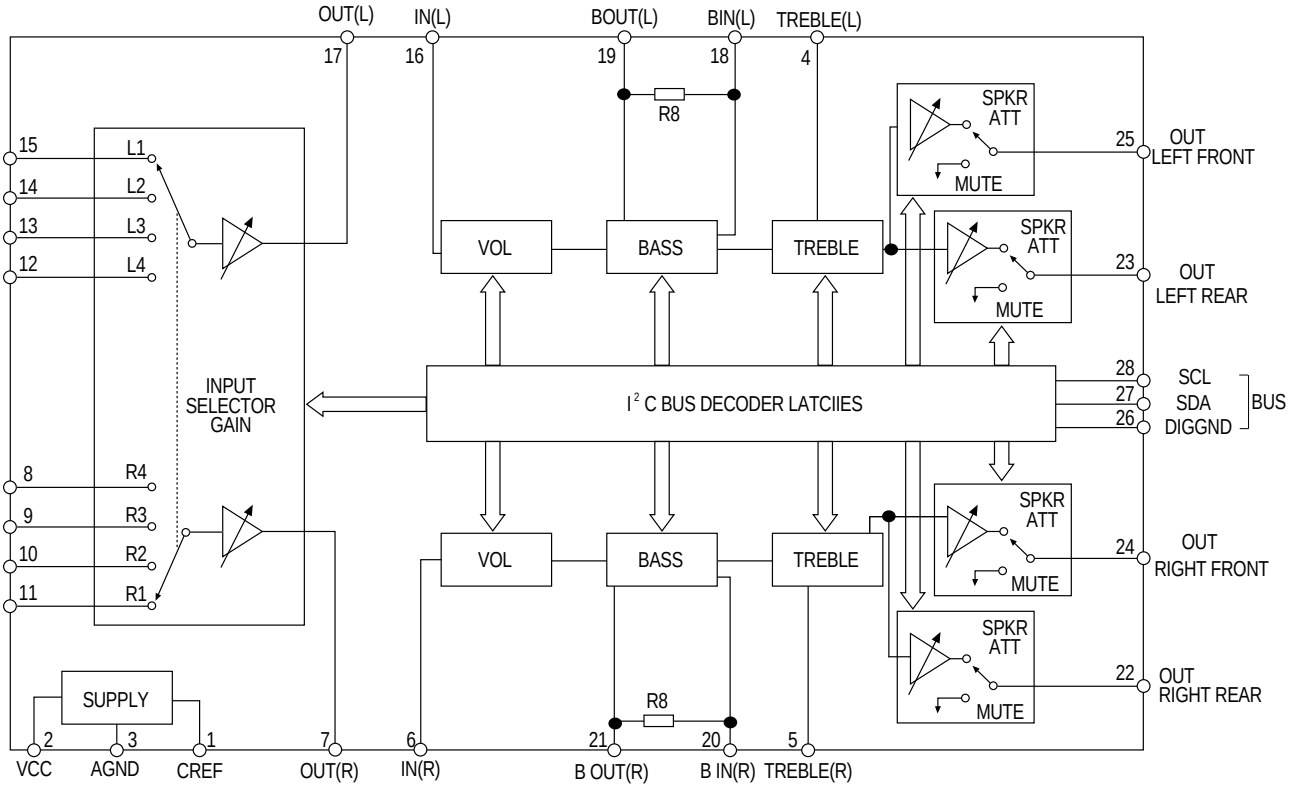
LA1836 : TIC1



M65846FP : DIC1

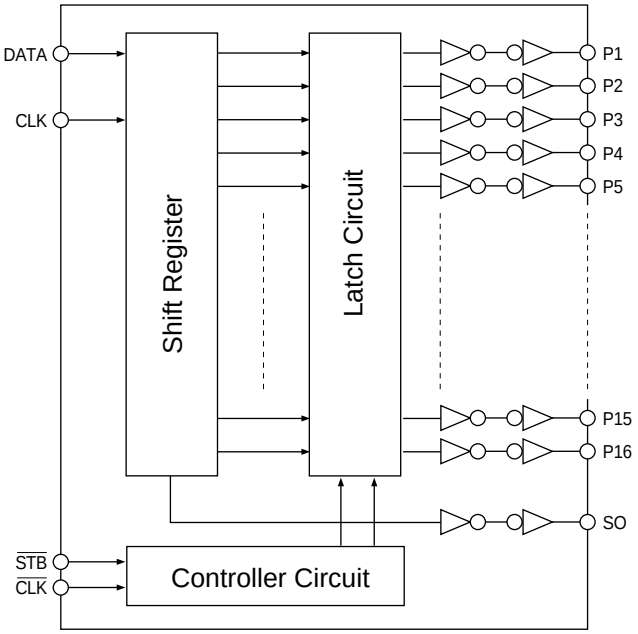


TDA7318 : FIC1

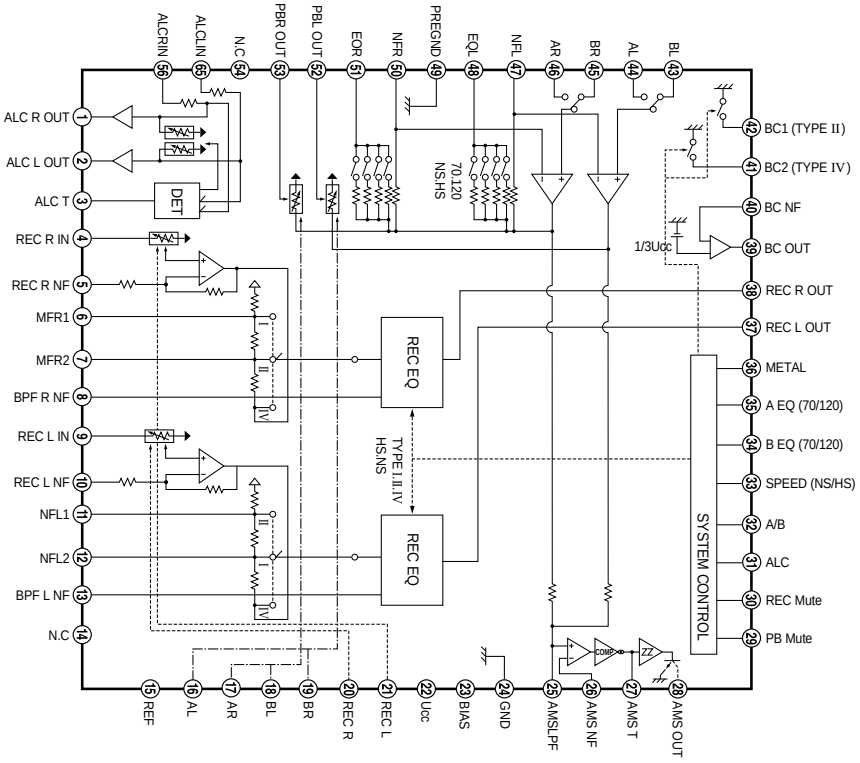


9-4-2 Cassette Deck Section

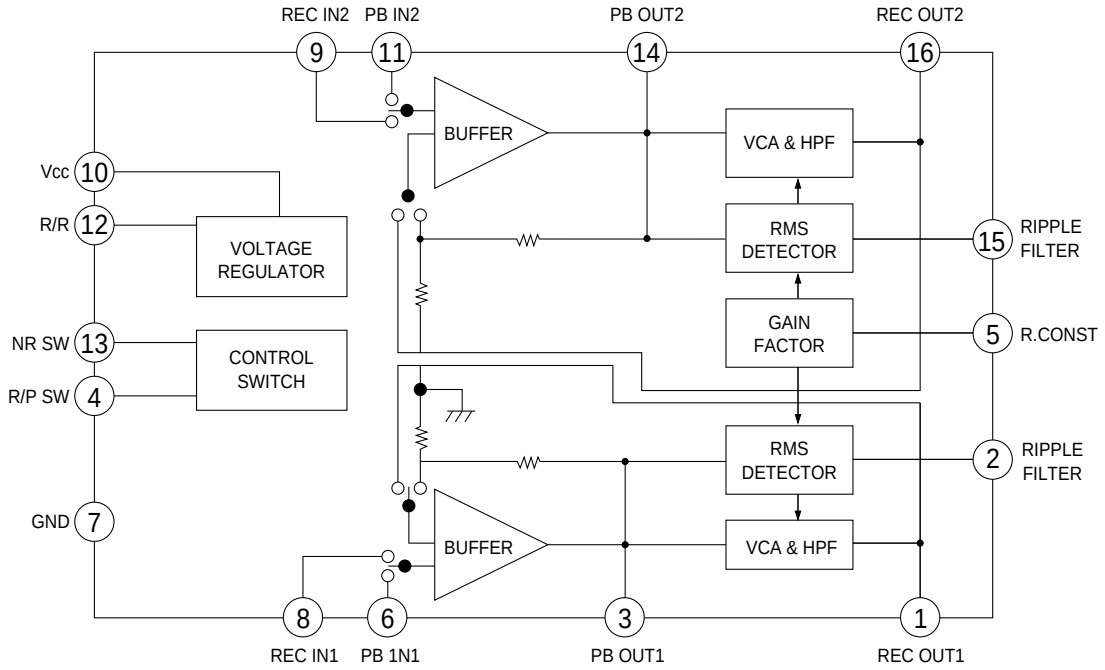
NJU3716M : JIC2, UIC2



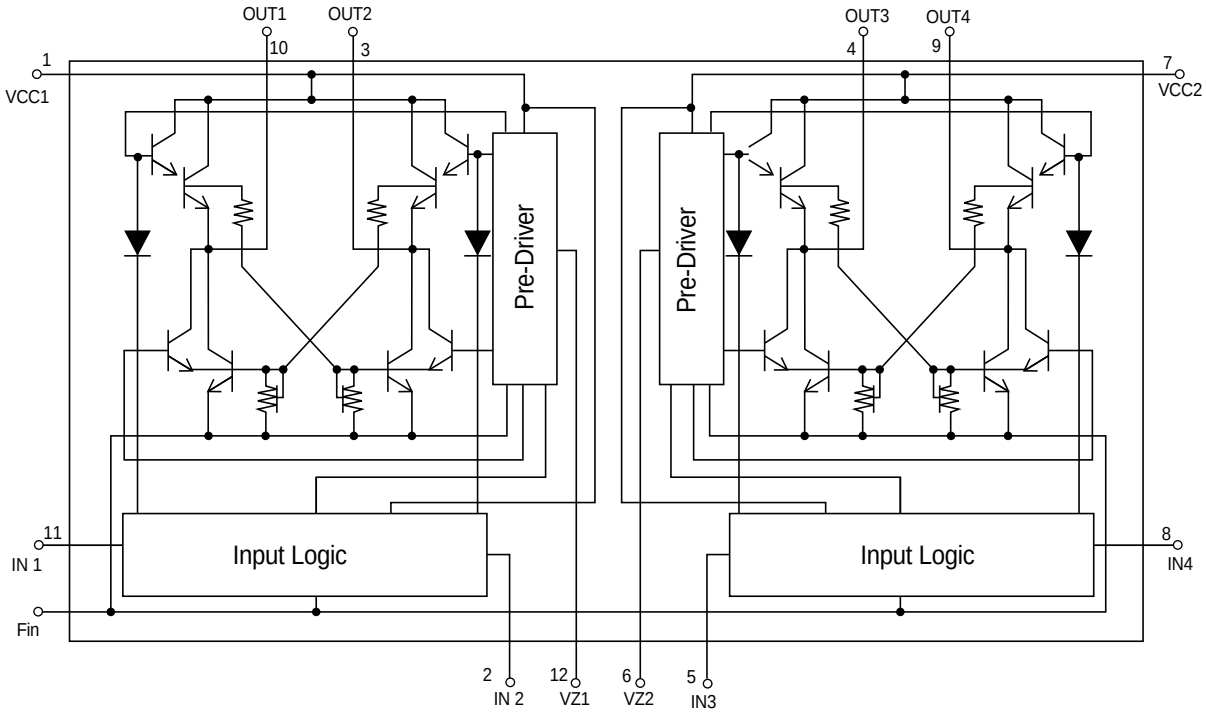
BA3442AKS : JIC1



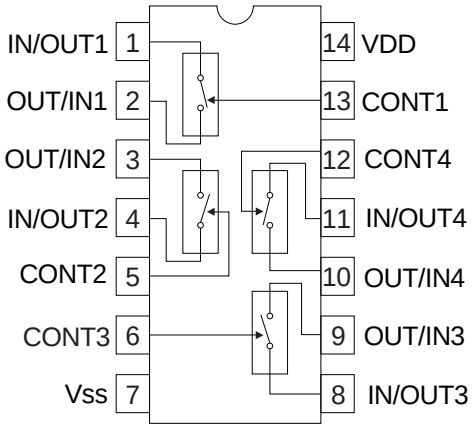
KA2271B : DIC1



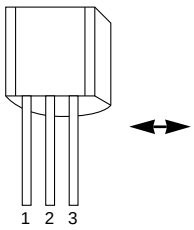
LB1649 : UIC4



MC14066 : DIC2

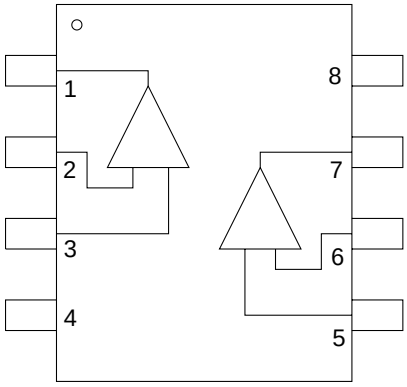


9-4-3 CD Section



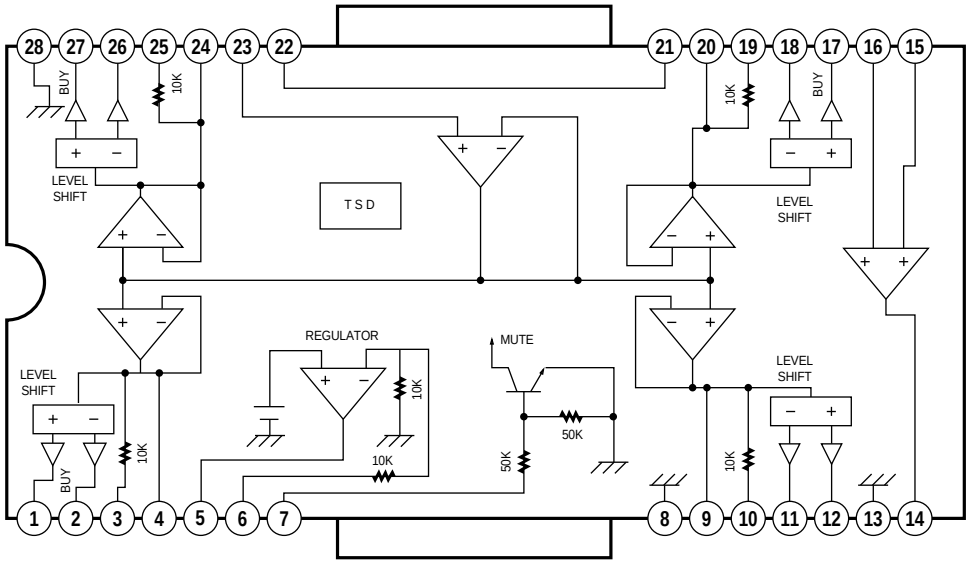
TR	1	2	3
B564	E	B	C
A928	E	C	B

NJM2100M(OP AMP) : XIC02

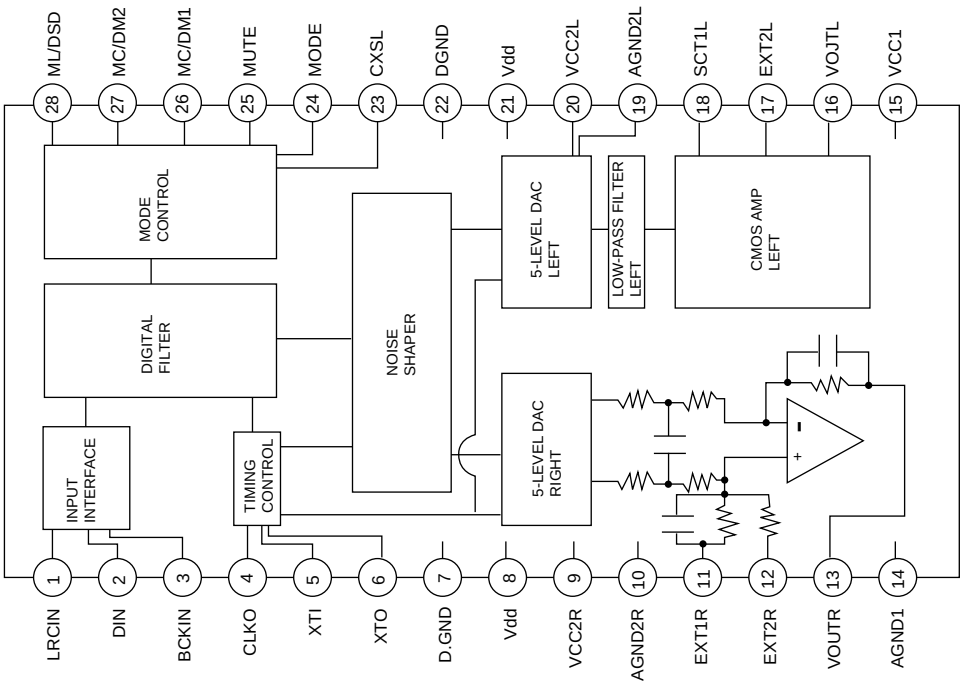


1. A OUTPUT
2. A- OUTPUT
3. A+ INPUT
4. V-
5. B+ INPUT
6. B- INPUT
7. B OUTPUT
8. V+

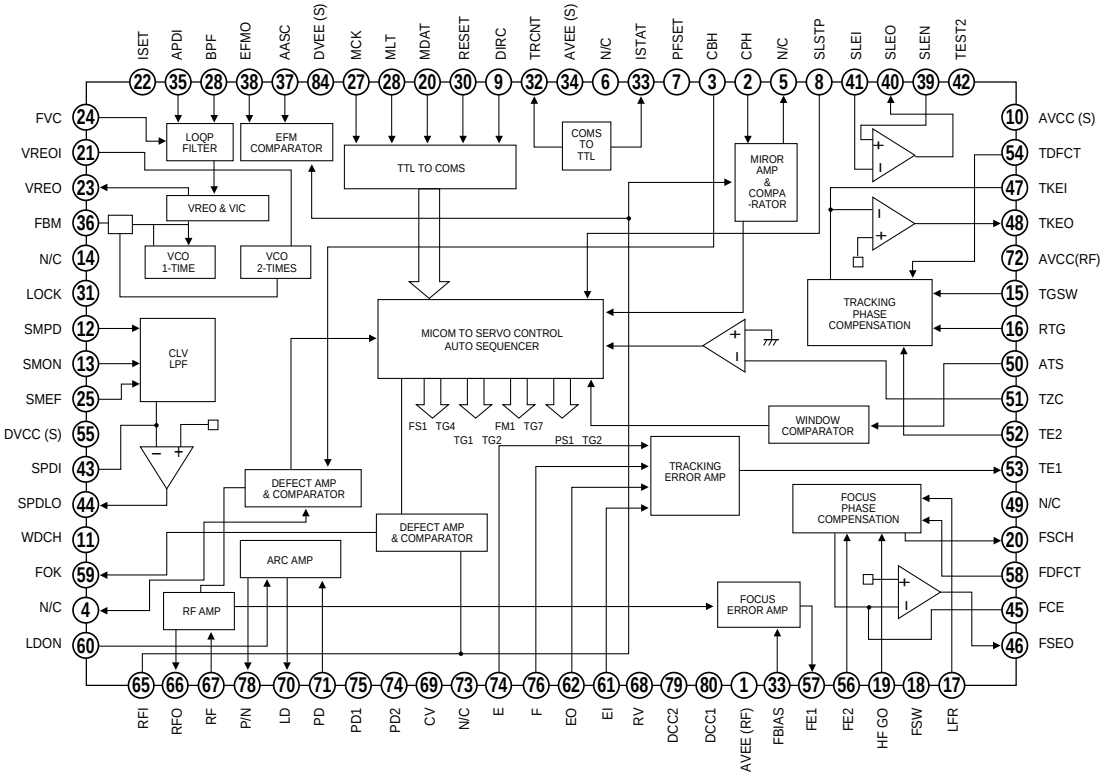
KA9258 : WIC03



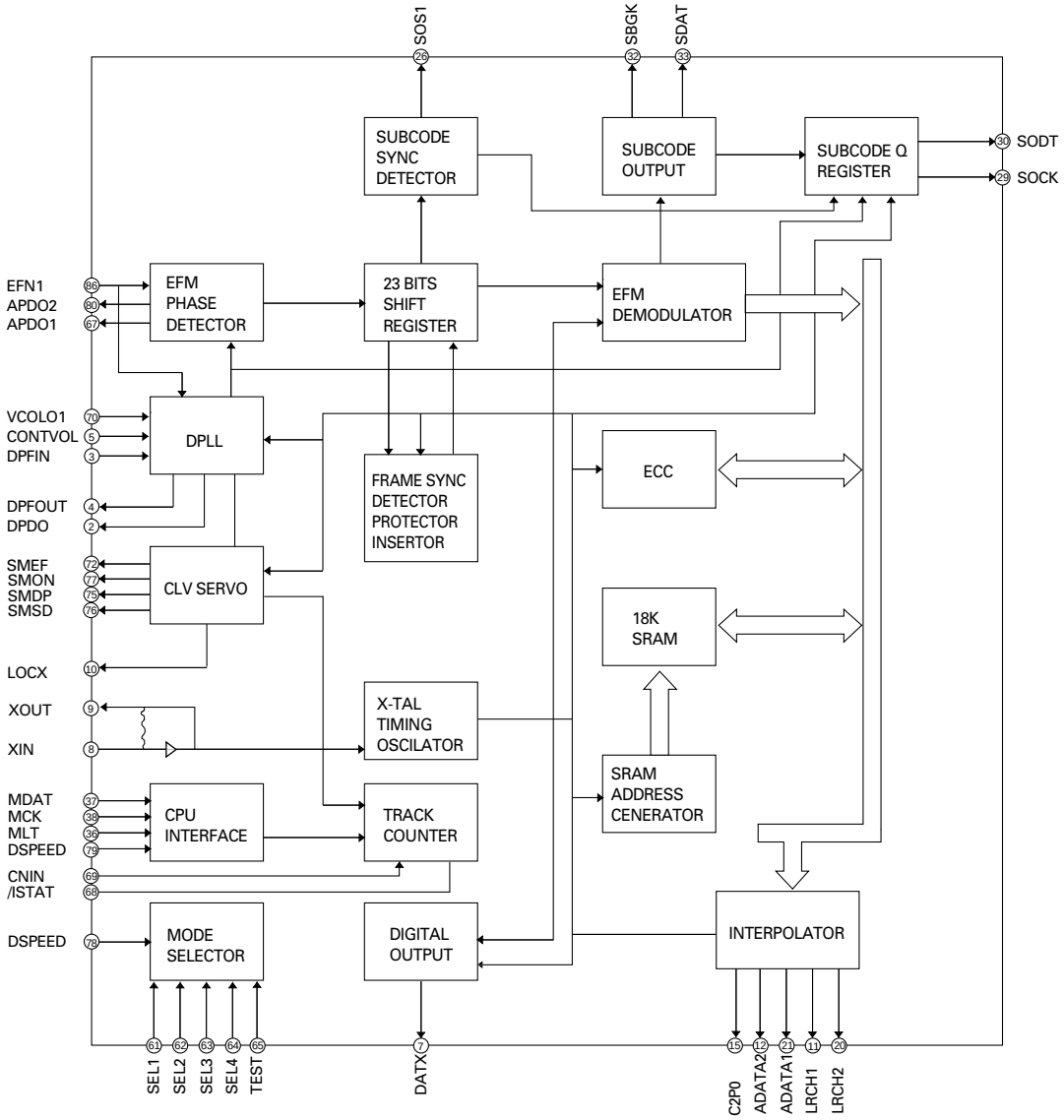
PCM1701U(D/A CONVERTOR IC) : XIC01



KA9220(ASSP) : WIC01



KS9283(DSP) : WIC02



9-5 µ-com

9-5-1 LC866232 : UIC1

No.	Port	Name	I/O	Description
1	P52			
2	PWM 1	VOL_LED	O	VOLUME LED
3	P20	VOL_DN	O	VOLUME DOWN
4	P21	VOL_UP	O	VOLUME UP
5	P22	MUTE_A	O	A-MUTE
6	P23	MIC	O	MIC ON/OFF
7	P24	PLL_CE	O	CE(LC72131)
8	P25	PLL_D0	O	DATA OUT (LC72131, TDA7318)
9	P26	PLL_CLK	O	CLK(LC72131,TDA7318)
10	P27	PLL_DI	I	DATA(LC72131)
11	TEST1			
12	/RES			
13	XT1			
14	XT2			
15	VSS			
16	CF 1			
17	CF 2			
18	VDD			
19	P80	KEYIN1	I	KEY IN (A/D INPUT)
20	P81	KEYIN2	I	KEY IN (A/D INPUT)
21	P82	KEYIN3	I	KEY IN (A/D INPUT)
22	P83	EQIN	I	EQ IN (A/D INPUT)
23	P84	JOGUP	I	JOG IN (UP)
24	P85	OPTION	I	OPTION IN
25	P86	JOGDN	I	JOG IN (DOWN)
26	P87	MICIN	I	MIC IN SENSE
27	P70	Z_SENSE	I	Z-SENSE
28	P71	P_SENSE	I	POWER OFF SENSE
29	P72	P_TUNED	I	TUNED IN
30	P73	REMOCON	I	REMOCON IN
31	T0	T0	O	DIGIT 0
32	T1	T1	O	DIGIT 1
33	T2	T2	O	DIGIT 2
34	T3	T3	O	DIGIT 3
35	T4	T4	O	DIGIT 4
36	T5	T5	O	DIGIT 5
37	T6	T6	O	DIGIT 6
38	T7	T7	O	DIGIT 7
39	T8	T8	O	DIGIT 8
40	T9	T9	O	DIGIT 9
41	T10	T10	O	DIGIT 10
42	T11	T11	O	DIGIT 11
43	T12	T12	O	DIGIT 12
44	T13	T13	O	DIGIT 13
45	T14	T14	O	DIGIT 14
46	T15	T15	O	DIGIT 15
47	VDDVPP			

No.	Port	Name	I/O	Description
48	VP			
49	S16	S0	O	SEGMENT 0
50	S17	S1	O	SEGMENT 1
51	S18	S2	O	SEGMENT 2
52	S19	S3	O	SEGMENT 3
53	S20	S4	O	SEGMENT 4
54	S21	S5	O	SEGMENT 5
55	S22	S6	O	SEGMENT 6
56	S23	S7	O	SEGMENT 7
57	S24	S8	O	SEGMENT 8
58	S25	S9	O	SEGMENT 9
59	S26	S10	O	SEGMENT 10
60	S27	S11	O	SEGMENT 11
61	S28	S12	O	SEGMENT 12
62	S29	S13	O	SEGMENT 13
63	S30	S14	O	SEGMENT 14
64	S31	S15	O	SEGMENT 15
65	P00	CTRL_A	O	BA3834 CONTROL A
66	P01	CTRL_B	O	BA3834 CONTROL B
67	P02	CTRL_C	O	BA3834 CONTROL C
68	P03	BGNS_MUT	O	BGNS MUTE
69	P04	BGNS_CLK	O	BGNS CLK
70	P05	BGNS_DAT	O	BGNS DATA
71	P06	BGNS_CH	O	BGNS CH
72	P07	BGNS_RES	O	BGNS RES
73	P10	BGNS_NAR	I	BGNS NAR
74	P11	BGNS_ST	O	BGNS ST
75	P12	SRS_LED	O	SRS LED
76	P13	SYS_DO	O	SYSTEM DATA OUT
77	P14	SYS_DI	I	SYSTEM DATA IN
78	P15	SYS_CLK	O	SYSTEM CLOCK
79	P16	LEV_LED	O	RELAX LEVEL LED
80	P17	REX_LED	O	RELAX LED
81	P30	SBS_LED	O	SBS LED
82	P31	REX_LED	O	RELAX LED
83	P32	EQ_LED	O	EQ LED
84	P33	POWER	O	POWER ON/OFF
85	P34	SRS_ON	O	SRS ON/OFF
86	P35	DSP_CE	O	CE (M65846)
87	P36	DSP_CLK	O	CLK (M65840,M65846)
88	P37	DSP_DO	O	DATA(M65840,M65846)
89	VSS			
90	VDD			
91	P40	REX_BUSY	I	RELAX BUSY IN
92	P41	SYS_CE	O	SYSTME CE
93	P42	ST_IN	I	STEREO IN
94	P43	SW_BC	O	M62453 SW B, C
95	P44	SW_A	O	M62453 SW A
96	P45			
97	P46	KEY_CE	O	CE (M65840)
98	P47	JOG_LED	O	JOG LED
99	P50			
100	P51			

9-5-2 LC866232 : UIC1

No.	Port	Name	I/O	Description
1	P52	EEP_DI	I	EEPROM DATA IN
2	PWM 1	EEP_DO	O	EEPROM/EXPIC DATA OUT
3	P20	EEP_CL	O	EEPROM CLOCK
4	P21	EEP_CE	O	EEPROM CHIP ENABLE
5	P22	EXP_CL	O	EXPANDER CLOCK
6	P23	EXP_CE	O	EXPANDER CHIP ENABLE
7	P24	A/SOL	O	A DECK SOLENOID
8	P25			V-CD PORT
9	P26			V-CD PORT
10	P27			V-CD PORT
11	TEST	TEST1	O	NO USE
12	/RES	RESET	I	MICOM RESET
13	XT1	XT1	I	NO USE
14	XT2	XT2	O	NO USE
15	VSS	GND		
16	CF 1	CF1	I	12MHZ OSC IN
17	CF 2	CF2	O	12MHZ OSC OUT
18	VDD	VDD		
19	P80			V-CD¿° PORT
20	P81	AMPS	I	MUSIC IN PORT in AMPS
21	P82	A/HALL	I	A DECK HALL SENSE
22	P83	A/HALF	I	A DECK TAPE IN
23	P84	A/MODE	I	A PLAY SENSE
24	P85	KEY 1	I	1+6 KEY AD INPUT
25	P86	KEY 2	I	CD AD KEY INPUT
26	P87	KEY 3	I	DECK AD KEY INPUT
27	P70	SCOR	I	SCOR INTERRUPT
28	P71	SYS_CE	I	SYSTEM CONTROL ENABLE
29	P72	P SENS	I	POWER OFF SENSE
30	P73	OPTION	I	OPTION PORT
31	S0	G1	O	VFD GRID 1
32	S1	G2	O	VFD GRID 2
33	S2	G3	O	VFD GRID 3
34	S3	G4	O	VFD GRID 4
35	S4	G5	O	VFD GRID 5
36	S5	G6	O	VFD GRID 6
37	S6	G7	O	VFD GRID 7
38	S7	G8	O	VFD GRID 8
39	S8	G9	O	VFD GRID 9
40	S9	G10	O	VFD GRID 10
41	S10	G11	O	VFD GRID 11
42	S11	G12	O	VFD GRID 12
43	S12	G13	O	VFD GRID 13
44	S13	G14	O	VFD GRID 14
45	S14	G15	O	VFD GRID 15
46	S15	G16	O	VFD GRID 16
47	VDVP	VDD		VFD VDD
48	VP	VPP		-32V
49	S16	S1	O	VFD SEG 1

No.	Port	Name	I/O	Description
50	S17	S2	O	VFD SEG 2
51	S20	S3	O	VFD SEG 3
52	S19	S4	O	VFD SEG 4
53	S20	S5	O	VFD SEG 5
54	S21	S6	O	VFD SEG 6
55	S22	S7	O	VFD SEG 7
56	S23	S8	O	VFD SEG 8
57	S24	S9	O	VFD SEG 9
58	S25	S10	O	VFD SEG 10
59	S26	S11	O	VFD SEG 11
60	S27	S12	O	VFD SEG 12
61	S28	S13	O	VFD SEG 13
62	S29	S14	O	VFD SEG 14
63	S30	S15	O	VFD SEG 15
64	S31	S16	O	VFD SEG 16
65	P00	MUTE	O	DSP MUTE
66	P01	LATCH	O	CD DSP/SSP LATCH
67	P02	DATA	O	CD DSP/SSP DATA
68	P03	CLOCK	O	CD DSP/SSP CLOCK
69	P04	OPN_SW	I	TRAY OPEN LIMIT SW
70	P05	CLS_SW	I	TRAY CLOSE LIMIT SW
71	P06	FOK	I	FOCUS OK
72	P07	GFS	I	CONSTANT VELOCITY ON
73	P10	LDON	O	LDON/XRST
74	P11	SUBQ	I	SUB Q DATA INPUT
75	P12	SQCK	O	SUBQ DATA INPUT CLOCK
76	P13	SYS_DO	O	SYSTEM COMM DATA
77	P14	SYS_DI	I	SYSTEM COMM DATA IN
78	P15	SYS_CL	I	SYSTEM COMM CLOCK
79	P16	ISTAT	I	SENSE
80	P17	OPENM	O	DOOR/PLATE OPEN MOTOR
81	P30	CLOSM	O	DOOR/PLATE CLOSE MOTOR
82	P31	CHUCKS	I	MISS CHUCKING SENSE
83	P32	DSCSNS	I	8/12 CM DISC SENSE
84	P33	SOLENO	O	SOLONOID
85	P34	CASEDN	O	DISC CASE/PU UNIT DN MOTOR
86	P35	CASEUP	O	DISC CASE/PU UNIT UP MOTOR
87	P36	PKDNSW	I	PU UNIT DOWN SW
88	P37	PKUPSW	I	PU UNIT UP SW
89	GND			
90	VDD			
91	P40	LOADPS	I	LOADING PLATE P.SENSOR
92	P41	UNLMTS	I	LOADING PLATE PLATE SW
93	P42	CASEPS	II	DISC CASE P.SENSOR
94	P43	CASELM	I	DISC CASE LIMIT SW
95	P44	R.REC	I	B DECK R.REC SW
96	P45	B/MODE	I	B DECK PLAY SENSE
97	P46	B/HALF	I	B DECK TAPE IN SW
98	P47	B/HALL	I	B DECK HALL
99	P50	F.REC	I	B DECK F.REC
100	P51	B/SOL	O	B DECK SOL

9-5-3 NJU3716 : JIC2

No.	PORT	I/O	Description	Remark
1	DUBBING	O	DUBBING MODE 'L'	ACTIVE 'L'
2	DB NR	O	DOLBU NR ON MODE 'L'	ACTIVE 'L'
3	REC MUTE	O	REC MUTE ON MODE 'H'	ACTIVE 'H'
4	A/B SELECTOR	O	A DECK MODE 'L'	ACTIVE 'H'
5	H/DUBBING	O	HI-DUBBING MODE 'H'	ACTIVE 'H'
6	GND			
7	CD OUTPUT	O	CD PLAY MODE 'L'	ACTIVE 'L'
8	MUTE	O	LINE MUTE	ACTIVE 'H'
9	CD MUTE	O	CD AUDIO MUTE	ACTIVE 'H'
10	REC	O	REC MODE 'L'	ACTIVE 'L'
11	CD B+	O	TUNER PLAY MODE 'L'	ACTIVE 'L'
12	S0	O	SERIAL DATA OUTPUT	
13	EDATA	I	EXPANDER DATA INPUT	
14	ECLK	I	EXPANDER CLOCK INPUT	
15	ESTB	I	EXPANDER STROVE	
16	CLR	I	CLEAR SIGNAL INPUT	
17	A MOTOR	O	A DECK PLAY MODE 'H'	ACTIVE 'H'
18	GND			
19		O	V-CD PORT	
20		O	V-CD PORT	
21		O	V-CD PORT	
22		O	V-CD PORT	
23	AB/PLAYBACK	O	A,B PLAY MODE 'H'	
24	VDD			

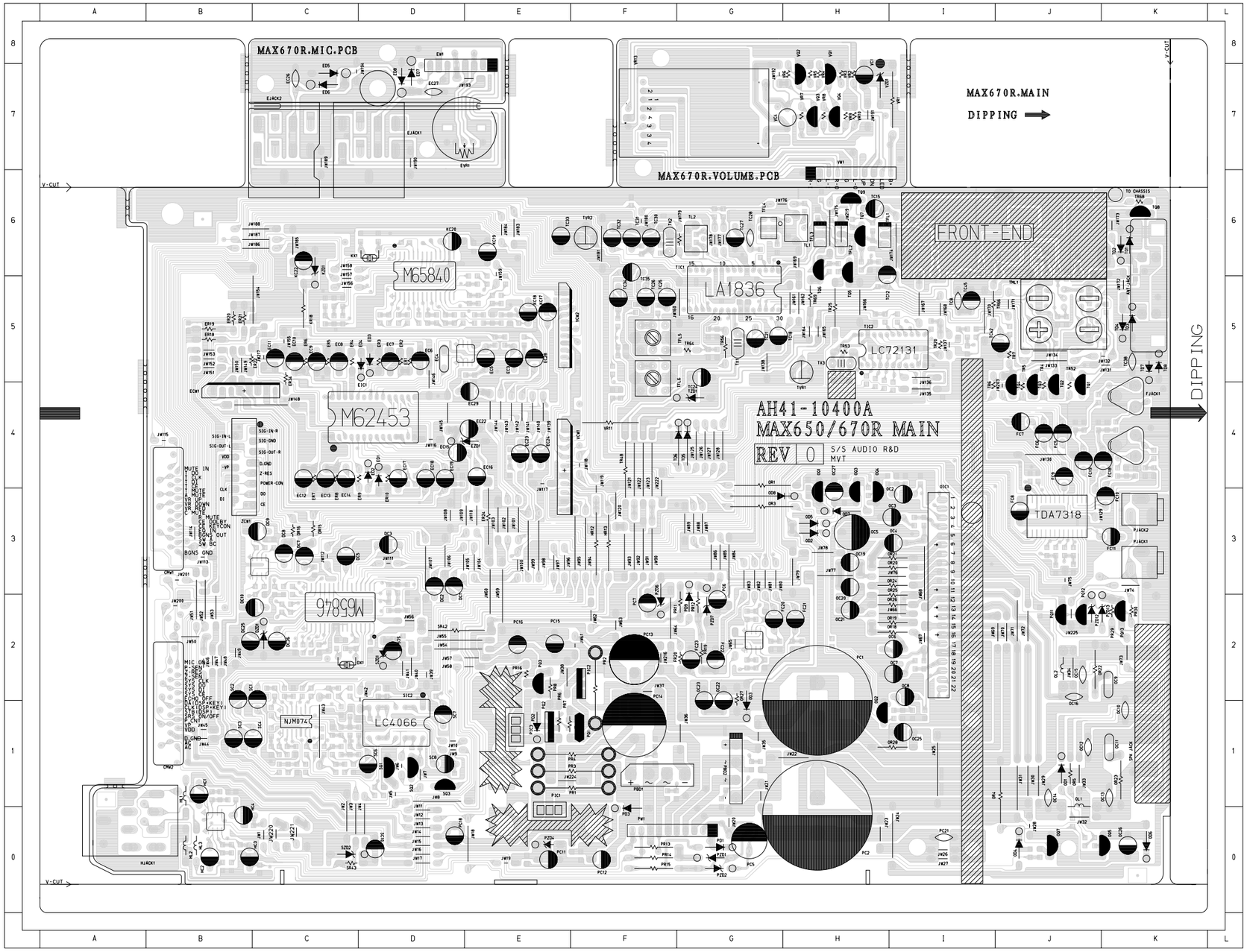
9-5-4 NJU3716 : UIC2

No.	PORT	I/O	Descriptions	Remarks
1	1 DISC	O	1 DISC LED	ACTIVE 'L'
2	2 DISC	O	2 DISC LED	ACTIVE 'L'
3	3 DISC	O	3 DISC LED	ACTIVE 'L'
4	EXTRA	O	EXTRA LED	ACTIVE 'L'
5	A R. PLAY	O	A REV.PLAY LED	ACTIVE 'H'
6	GND			
7	A F. PLAY	O	A FWD.PLAY LED	ACTIVE 'H'
8	CD SYNC	O	CD SYNC LED	ACTIVE 'L'
9	REC	O	REC LED	ACTIVE 'L'
10	B R. PLAY	O	B REV.PLAY LED	ACTIVE 'H'
11	B F.PLAY	O	B FWD. PLAY LED	ACTIVE 'H'
12	SO	O	SERIAL DATA OUTPUT	
13	EDATA	I	EXPANDER DATA INPUT	
14	ECLK	I	EXPANDER CLOCK INPUT	
15	ESTB	I	EXPANDER STROBE	
16	CLR	I	CLEAR SIGNAL INPUT	
17		O	NO USE	
18	GND			
19	B MOTOR	O	B DECK PLAY MODE 'H'	ACTIVE 'H'
20	CD PLAY	O	CD PLAY LED	ACTIVE 'H'
21	4 DISC	O	4 DISC LED	ACTIVE 'L'
22	5 DISC	O	5 DISC LED	ACTIVE 'L'
23	6 DISC	O	6 DISC LED	ACTIVE 'L'
24	VDD			

10. PCB Diagrams

10-1 Amp and Tuner Section

10-1-1 Main



*** RESISTOR ***

DR15 (C3)
DR16 (C3)
ER1 (D5)
ER10 (D3)
ER18 (B5)
ER19 (B5)
ER2 (D5)
ER20 (B5)
ER21 (B5)
ER22 (B5)
ER24 (E3)
ER3 (D5)
ER34 (C4)
ER4 (C5)
ER5 (C5)
ER6 (C5)
ER7 (C3)
ER8 (C3)
ER9 (D3)
FR19 (G2)
FR20 (G2)
HR12 (F3)
HR13 (F3)
JW179 (G6)
KR18 (C5)
OR1 (G4)
OR18 (H2)
OR19 (H2)
OR20 (H3)
OR21 (H3)
OR22 (J2)
OR23 (K1)
OR24 (H3)
OR25 (H2)
OR26 (H2)
OR27 (G1)
OR28 (H1)
OR3 (G3)
OR4 (J0)
OR5 (J1)
PR1 (E1)
PR11 (G2)
PR12 (G2)
PR13 (F0)
PR14 (F0)
PR15 (F0)
PR16 (E2)
PR2 (F1)
PR29 (K2)
PR3 (E1)
PR30 (K2)
PR4 (E1)
PR6 (E1)
PR7 (E1)
PR8 (E1)
SR42 (D2)
SR43 (C0)
TR20 (I5)
TR25 (H5)
TR4 (J4)
TR48 (F3)
TR5 (J4)
TR52 (J4)
TR53 (H5)
TR56 (G5)
TR6 (I4)
TR64 (G5)
TR66 (I5)
TR68 (K6)
TR69 (H5)
TR7 (J5)
VR1 (I7)
VR10 (H7)
VR11 (F4)
VR2 (H7)
VR3 (H7)
VR4 (H7)
VR5 (H7)
VR6 (H7)
VR7 (H7)
VR8 (H7)
VR9 (H7)

*** CONDENSER ***

DC1 (D2)
DC10 (C2)
DC2 (D2)
DC25 (B2)
DC26 (C2)
DC3 (D3)
DC5 (C3)
DC7 (C3)
DC8 (C3)
DC9 (C3)
DX1 (C2)
EC10 (C5)
EC11 (C5)
EC12 (C4)
EC13 (C4)
EC14 (C4)
EC15 (D4)
EC16 (E4)
EC17 (D4)
EC18 (D4)
EC19 (D4)
EC22 (D4)
EC23 (E4)
EC24 (E4)
EC26 (C7)
EC27 (D7)
EC28 (E5)
EC29 (E4)
EC3 (E5)
EC4 (D5)
EC5 (E5)
EC6 (D5)
EC7 (D5)
EC8 (C5)
EC9 (C5)
FC10 (K3)
FC11 (K3)
FC18 (K4)
FC19 (J4)
FC20 (G2)
FC21 (H2)
FC22 (G2)
FC23 (G2)
FC5 (J4)
FC6 (J4)
FC7 (J4)
FC8 (J3)
FC9 (J4)
HC1 (B1)
HC2 (B0)
HC3 (B0)
HC4 (B0)
KC17 (E5)
KC18 (E5)
KC19 (E6)
KC20 (D6)
KC22 (C6)
KX1 (D6)
OC10 (K1)
OC11 (K1)
OC12 (J1)
OC13 (K1)
OC14 (J1)
OC15 (J2)
OC16 (J2)
OC19 (H3)
OC2 (I3)
OC20 (H3)
OC21 (H2)
OC22 (G2)
OC23 (G2)
OC25 (I1)
OC26 (K0)
OC27 (H3)
OC3 (H3)
OC4 (I3)
OC5 (H3)
OC6 (H2)
OC7 (H2)
OC8 (I2)
OC9 (K2)
PC11 (E0)
PC12 (F0)
PC14 (F1)
PC15 (E2)
PC16 (E2)
PC18 (D0)
PC21 (I0)
PC5 (G0)
PC6 (G3)
PC7 (F2)
SC1 (C1)
SC10 (D0)
SC2 (B1)
SC3 (B1)
SC4 (C1)
SC6 (D1)
SC7 (D1)
SC8 (D1)
SC9 (D2)
TC12 (H5)
TC15 (H6)
TC18 (G5)
TC21 (G5)
TC24 (G5)
TC25 (F5)
TC26 (F5)
TC27 (G6)
TC28 (G6)
TC30 (F6)
TC31 (F6)
TC32 (F6)
TC33 (E6)
TC34 (F5)
TC35 (F6)
TC38 (K5)
TC42 (J5)
TC45 (I5)
TC8 (I5)
VC1 (H7)
VC4 (H7)

*** DIODE ***

DZD1 (C2)
ED1 (D4)
ED2 (D4)
ED3 (D5)
ED4 (D5)
ED5 (C7)
ED6 (C7)
ED7 (D8)
ED8 (D7)
EZD1 (D4)
KZD1 (C5)
OD1 (J1)
OD2 (H3)
OD3 (G1)
OD4 (J0)
OD5 (H3)
OD6 (K0)
OD7 (H3)
OD8 (H3)
PD1 (G0)
PD2 (E1)
PD3 (F0)
PD9 (G3)
PZD1 (G0)
PZD12 (J2)
PZD13 (K2)
PZD2 (G0)
PZD4 (E0)
PZD6 (F2)
PZD7 (G3)
SZD1 (D2)
SZD2 (D0)
TD1 (K6)
TD2 (K6)
TD3 (K5)
TD4 (K5)
TD5 (G4)
TD6 (G4)
TD7 (K5)
TD8 (K5)
TZD1 (G4)
VZD1 (H8)

*** TR ***

OQ1 (H3)
OQ2 (H1)
OQ3 (H3)
OQ4 (H4)
OQ5 (K0)
OQ7 (J0)
PIC2 (F2)
PQ1 (F1)
PQ11 (J2)
PQ12 (J2)
PQ13 (K2)
PQ2 (E1)
PQ3 (E2)
SQ1 (D1)
SQ2 (D1)
SQ3 (D1)
TQ1 (J4)
TQ2 (J4)
TQ3 (J4)
TQ4 (J4)
TQ5 (H5)
TQ6 (H5)
TQ7 (H6)
TQ8 (K6)
TQ9 (H6)
VQ1 (H7)
VQ2 (H7)
VQ3 (H7)
VQ4 (H7)

*** IC&WAFER ***

ECW1 (B4)
EW1 (D7)
PW1 (F0)
TFL4 (G6)
TL2 (G6)
VCW1 (E4)
VCW2 (E5)
VW1 (H6)

*** CHIP ***

DC11 (C3)
DC12 (C3)
DC13 (C3)
DC14 (C2)
DC15 (C2)
DC16 (C2)
DC17 (C2)
DC18 (C2)
DC19 (C2)
DC20 (C2)
DC21 (C2)
DC22 (D2)
DC23 (D2)
DC24 (D3)
DIC1 (C2)
DIC2 (C3)
DR10 (D2)
DR11 (D2)
DR12 (D3)
DR13 (D3)
DR14 (C2)
DR17 (C3)
DR18 (C3)
DR19 (C3)
DR20 (C3)
DR21 (C3)
DR22 (C3)
EC25 (D4)
EIC2 (E5)
ER11 (D4)
ER12 (D4)
ER13 (D4)
ER14 (E4)
ER15 (E4)
ER16 (E4)
ER17 (E4)
ER25 (E5)
ER26 (E5)
ER27 (E5)
ER28 (E5)
ER29 (E5)
ER30 (E5)
ER31 (B5)
ER32 (C5)
ER33 (C5)
ER35 (B3)
FC1 (K4)
FC12 (J4)
FC13 (J4)
FC14 (J3)
FC15 (J3)
FC16 (J3)
FC17 (J3)
FC2 (K4)
FC24 (G2)
FC25 (G2)
FC3 (J4)
FC4 (J4)
FIC1 (J3)
FIC2 (G2)
FR1 (K4)
FR10 (J3)
FR11 (H2)
FR12 (H2)
FR13 (G2)
FR14 (G2)
FR15 (G2)
FR16 (G2)
FR17 (G2)
FR18 (G2)
FR2 (K4)
FR3 (K4)
FR4 (K4)
FR5 (K4)
FR6 (K4)
FR7 (J4)
FR8 (J4)
FR9 (J3)
HC5 (B0)
HC8 (B1)
HIC1 (B0)
HR1 (B1)
HR16 (B0)
HR17 (B0)
HR2 (B1)
HR3 (B1)
HR4 (B1)
HR5 (B0)
HR6 (B0)
HR7 (B0)
HR8 (B0)
HR9 (C0)
JW195 (J0)
JW196 (C2)
JW197 (C1)
JW198 (C1)
JW199 (C1)
JW202 (J2)
JW204 (K5)
JW205 (G6)
JW206 (G5)
JW207 (G5)
JW208 (H5)
JW209 (I6)
JW210 (I6)
JW211 (J6)
JW212 (K6)
JW213 (J5)
JW214 (K5)
JW215 (J5)
JW223 (J5)
KC10 (E5)
KC11 (E5)
KC12 (D6)
KC13 (D6)
KC14 (C5)
KC15 (C5)
KC16 (C5)
KC2 (E5)
KC21 (E6)
KC23 (E5)
KC3 (E5)
KC4 (D5)
KC5 (D5)
KC6 (D5)
KC7 (D5)
KC8 (D5)
KC9 (E5)
KIC1 (D5)
KR10 (C5)
KR11 (C5)
KR12 (E5)
KR13 (E5)
KR14 (E5)
KR15 (E5)
KR16 (E5)
KR17 (D6)
KR19 (E5)
KR2 (E5)
KR3 (E5)
KR4 (D5)
KR5 (D5)
KR6 (D5)
KR7 (D5)
KR8 (D5)
KR9 (C5)
OC1 (I4)
OC17 (I1)
OC18 (H4)
OR10 (I4)
OR11 (I3)
OR12 (I3)
OR13 (I2)
OR14 (I2)
OR15 (I1)
OR16 (I1)
OR17 (I1)
OR29 (J0)
OR30 (J0)
OR31 (H2)
OR32 (H3)
OR33 (H4)
OR34 (H3)
OR35 (H3)
OR6 (J0)
OR7 (H4)
OR8 (I4)
OR9 (J0)
PC10 (G1)
PC17 (G1)
PC19 (G1)
PC20 (G1)
PC3 (F1)
PC4 (F1)
PC8 (F1)
PC9 (F1)
PR10 (F0)
PR17 (E1)
PR33 (E0)
PR5 (E1)
PR9 (F0)
SC5 (C1)
SIC1 (C1)
SR1 (D2)
SR10 (C1)
SR11 (C1)
SR12 (C1)
SR13 (C1)
SR14 (C1)
SR15 (C1)
SR16 (C1)
SR17 (C1)
SR18 (C1)
SR19 (C1)
SR2 (D1)
SR21 (C1)
SR22 (C1)
SR23 (D1)
SR24 (D1)
SR25 (C1)
SR26 (C1)
SR27 (C1)
SR28 (C1)
SR29 (C1)
SR3 (D1)
SR30 (C1)
SR31 (C2)
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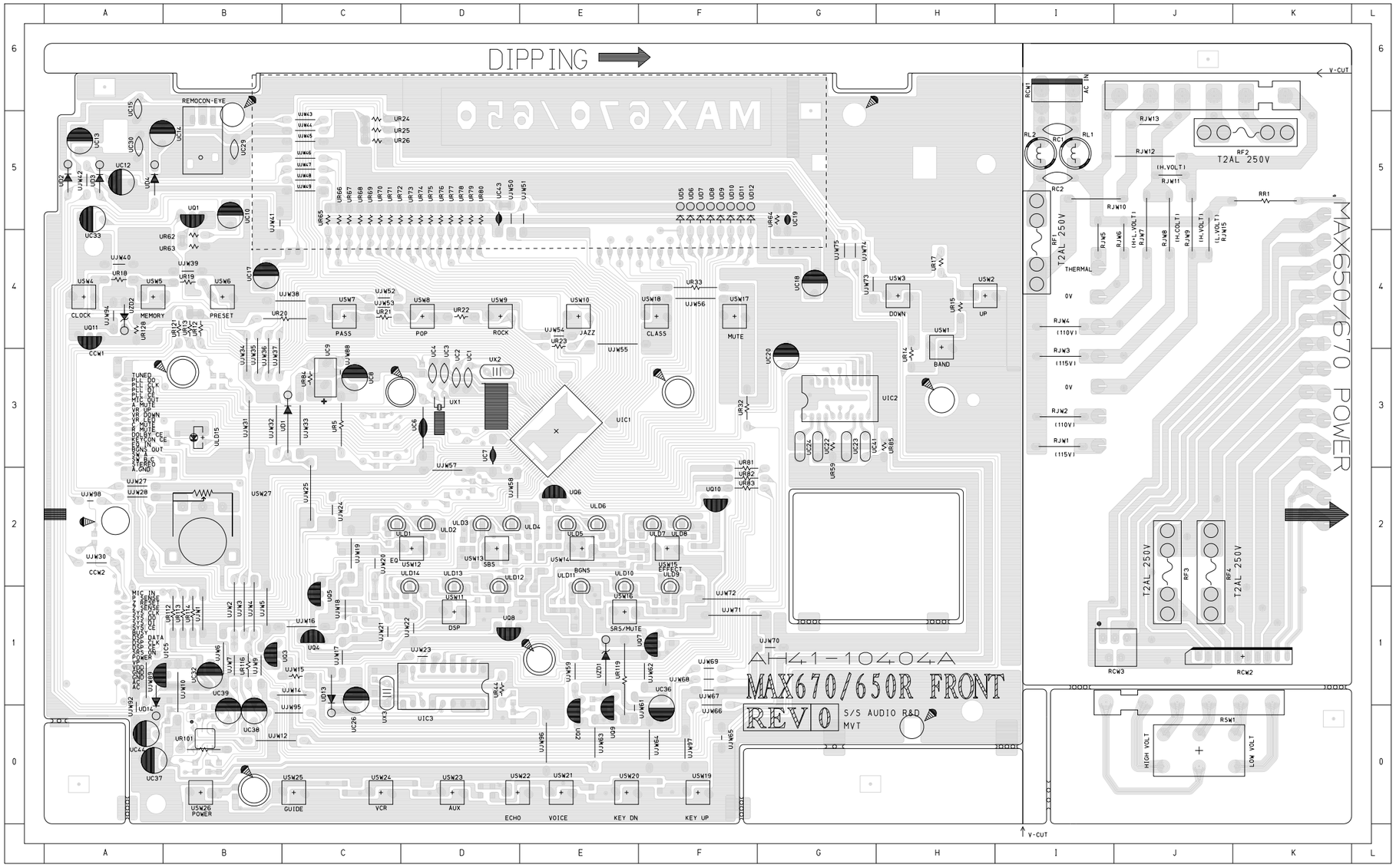
SR34 (C2)
SR35 (C2)
SR36 (C2)
SR37 (C2)
SR38 (C2)
SR39 (C1)
SR4 (D1)
SR40 (C1)
SR41 (D2)
SR5 (D2)
SR6 (D2)
SR7 (D1)
SR8 (D1)
SR9 (C1)
TC10 (I5)
TC13 (H5)
TC14 (H6)
TC16 (H5)
TC17 (H5)
TC19 (G5)
TC2 (J6)
TC20 (G5)
TC22 (G5)
TC23 (G5)
TC29 (F6)
TC3 (J5)
TC36 (F5)
TC37 (F4)
TC39 (H5)
TC4 (J6)
TC40 (G5)
TC41 (F6)
TC43 (G6)
TC44 (I6)
TC46 (G5)
TC6 (I5)
TC7 (I5)
TR1 (J6)
TR12 (I5)
TR13 (I5)
TR14 (I4)
TR15 (H4)
TR16 (H4)
TR17 (H5)
TR18 (I5)
TR19 (I5)
TR2 (J5)
TR21 (I5)
TR22 (H5)
TR23 (H5)
TR24 (H5)
TR27 (H6)
TR28 (H6)
TR29 (H6)
TR30 (H6)
TR31 (H6)
TR32 (H6)
TR33 (H6)
TR34 (H6)
TR35 (G6)
TR36 (G6)
TR37 (F6)
TR38 (F6)
TR39 (F5)
TR40 (F5)
TR41 (G5)
TR42 (G5)
TR45 (G6)
TR46 (F5)
TR47 (F4)
TR49 (F5)
TR50 (F5)
TR51 (I5)
TR55 (H6)
TR57 (H6)
TR58 (I4)
TR59 (I6)
TR61 (I6)
TR62 (J5)
TR63 (J5)
TR65 (H6)
TR67 (I5)
TR8 (J6)
TR9 (J6)

10-1-2 Front



XXX IC&WAFER XXX

RCW2 (K1)
RSW1 (J0)
USW1 (H4)
USW10 (E4)
USW11 (D1)
USW12 (D2)
USW13 (D2)
USW14 (E2)
USW15 (F2)
USW16 (E1)
USW17 (F4)
USW18 (F4)
USW19 (F0)
USW2 (H4)
USW20 (E0)
USW21 (E0)
USW22 (D0)
USW23 (D0)
USW24 (C0)
USW25 (C0)
USW26 (B0)
USW3 (H4)
USW4 (A4)
USW5 (A4)
USW6 (B4)
USW7 (C4)
USW8 (D4)
USW9 (D4)

UR1 (C3)
UR10 (B3)
UR102 (B0)
UR103 (B0)
UR104 (B0)
UR105 (B1)
UR106 (B0)
UR107 (B0)
UR108 (B0)
UR11 (B3)
UR111 (A1)
UR118 (B3)
UR122 (E2)
UR123 (A3)
UR124 (B3)
UR125 (A3)
UR126 (A3)
UR127 (A2)
UR2 (C3)
UR27 (F2)
UR28 (F2)
UR29 (F2)
UR3 (C3)
UR30 (E2)
UR31 (F2)
UR34 (F0)
UR35 (E0)
UR36 (D0)
UR37 (D0)
UR38 (D0)
UR39 (C1)
UR4 (C3)
UR40 (C0)
UR41 (B0)
UR42 (E1)
UR45 (E2)
UR46 (E2)
UR47 (E2)
UR48 (E2)
UR49 (E2)
UR50 (D2)
UR51 (D2)
UR52 (D2)
UR53 (D2)
UR54 (D2)
UR55 (C2)
UR56 (C2)
UR57 (D2)
UR58 (D2)
UR6 (D2)
UR7 (D2)
UR8 (D2)
UR86 (C1)
UR87 (C1)
UR88 (D1)
UR89 (D1)
UR9 (B3)
UR90 (D1)
UR91 (D1)
UR92 (E1)
UR93 (E1)
UR94 (E1)
UR95 (E1)
UR96 (F1)
UR97 (F1)
UR98 (F2)
UR99 (E1)

XXX CHIP XXX

UC25 (C1)
UC27 (C1)
UC28 (C1)
UC31 (B1)
UC34 (D1)
UC35 (B0)
UC42 (D0)
UC45 (B0)
UC5 (D3)
UIC1 (E3)
UJW76 (E2)
UJW77 (E1)
UJW78 (E2)
UJW79 (E2)
UJW80 (E1)
UJW81 (E1)
UJW82 (D2)
UJW83 (C1)
UJW84 (C1)
UJW85 (C1)
UJW86 (C2)
UJW87 (E2)
UJW93 (F1)

XXX RESISTOR XXX

RR1 (K5)

UJW15 (B1)	UR18 (A4)	UR62 (B4)	UR76 (D4)
UR101 (B0)	UR19 (B4)	UR63 (B4)	UR77 (D4)
UR112 (B1)	UR20 (B4)	UR64 (G4)	UR78 (D4)
UR113 (B1)	UR21 (C4)	UR65 (C4)	UR79 (D4)
UR114 (B1)	UR22 (D4)	UR66 (C4)	UR80 (D4)
UR116 (B1)	UR23 (E4)	UR67 (C4)	UR81 (F2)
UR119 (E0)	UR24 (C5)	UR68 (C4)	UR82 (F2)
UR12 (B4)	UR25 (C5)	UR69 (C4)	UR83 (F2)
UR121 (B4)	UR26 (C5)	UR70 (C4)	UR84 (C3)
UR128 (A4)	UR32 (F3)	UR71 (C4)	UR85 (H3)
UR13 (B4)	UR33 (F4)	UR72 (C4)	
UR14 (H3)	UR44 (D1)	UR73 (D4)	
UR15 (H4)	UR5 (C3)	UR74 (D4)	
UR17 (H4)	UR59 (G3)	UR75 (D4)	

XXX CONDENSER XXX

RC1 (I5)	UC23 (G3)	UC43 (D4)
RC2 (I5)	UC24 (G3)	UC44 (A0)
UC1 (D3)	UC26 (C0)	UC6 (D3)
UC10 (B5)	UC29 (B5)	UC7 (D2)
UC12 (A5)	UC3 (D3)	UC8 (C3)
UC13 (A5)	UC30 (A5)	UC9 (C3)
UC14 (A5)	UC32 (B1)	
UC15 (A5)	UC33 (A5)	
UC17 (B4)	UC36 (F1)	
UC18 (G4)	UC37 (B0)	
UC19 (G4)	UC38 (B0)	
UC2 (D3)	UC39 (B0)	
UC20 (G3)	UC4 (D3)	
UC22 (G3)	UC41 (G3)	

XXX DIODE XXX

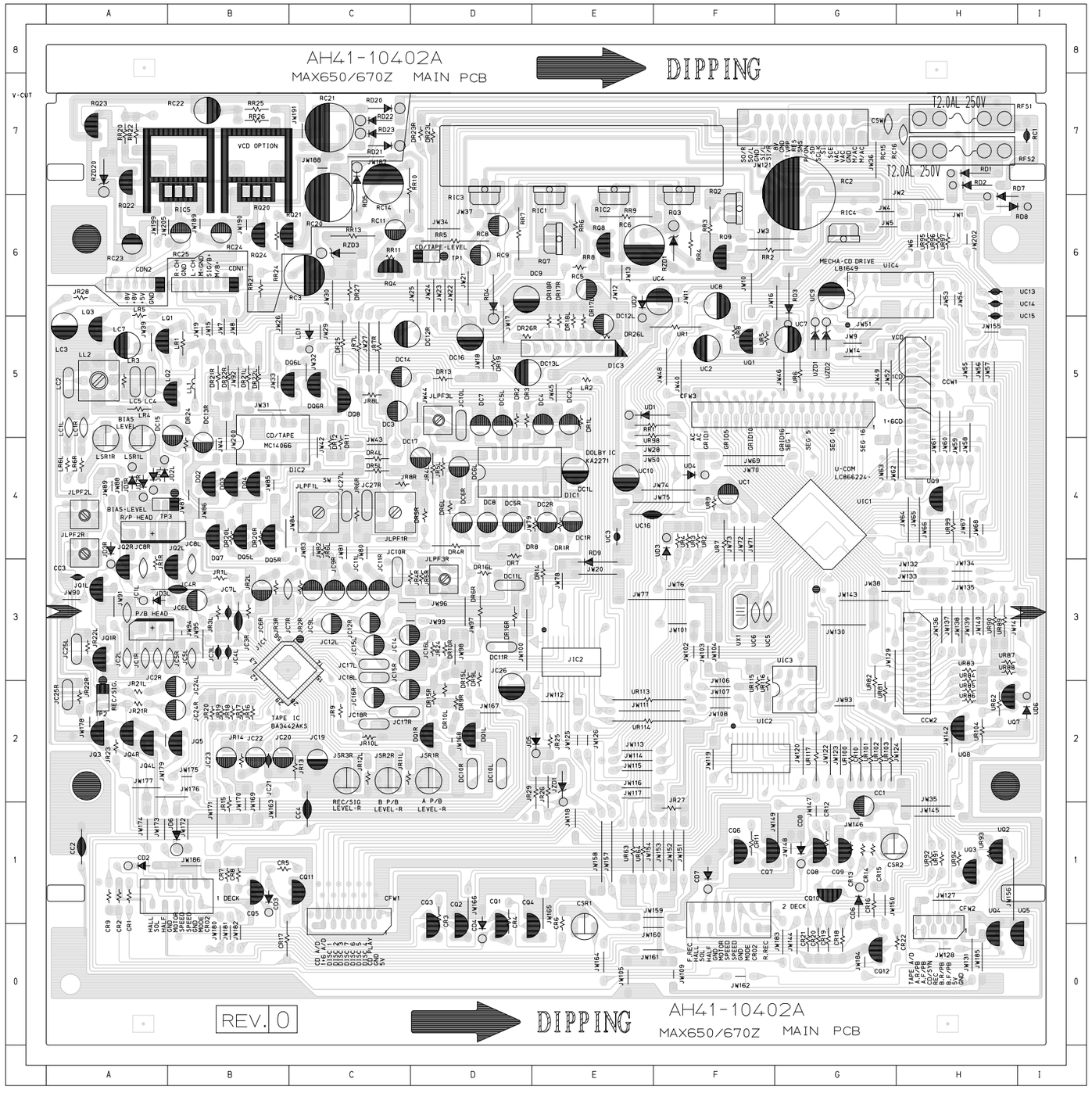
UD1 (C3)
UD10 (F5)
UD11 (F5)
UD12 (F5)
UD13 (C0)
UD14 (A0)
UD2 (A5)
UD3 (A5)
UD4 (A5)
UD5 (F5)
UD6 (F5)
UD7 (F5)
UD8 (F5)
UD9 (F5)
UZD1 (E1)
UZD2 (A4)

XXX TR XXX

UIC5 (B1)
UQ1 (B5)
UQ10 (F2)
UQ11 (A4)
UQ2 (E0)
UQ3 (B1)
UQ4 (C1)
UQ5 (C1)
UQ6 (E2)
UQ7 (F1)
UQ8 (D1)
UQ9 (E0)

10-2 Cassette Deck and CD Section

10-2-1 Cassette Deck



*** RESISTOR ***

CR1 (A1)
CR10 (G2)
CR11 (F1)
CR12 (G1)
CR13 (G1)
CR14 (G1)
CR15 (G1)
CR16 (G0)
CR17 (B0)
CR18 (G0)
CR19 (G0)
CR2 (A1)
CR20 (G0)
CR21 (G0)
CR22 (H0)
CR3 (D0)
CR4 (D0)
CR5 (C1)
CR6 (E1)
CR7 (B1)
CR8 (B1)
CR9 (A1)
DR10L (D3)
DR10R (D3)
DR11 (C4)
DR12 (C4)
DR13 (D5)
DR14 (E3)
DR15L (D3)
DR15R (D2)
DR16L (D3)
DR16R (D3)
DR17L (E5)
DR17R (E5)
DR18L (E5)
DR18R (E5)
DR19 (D5)
DR1L (E5)
DR1R (E4)
DR2 (D5)
DR20L (B4)
DR20R (B4)
DR21L (B5)
DR21R (B5)
DR22L (B5)
DR22R (B5)
DR23L (D7)
DR23R (D7)
DR24 (B4)
DR25 (C5)
DR26L (E5)
DR26R (D5)
DR27 (C6)
DR3 (D5)
DR4L (C4)
DR4R (D4)
DR5L (C4)
DR5R (D4)
DR6L (D4)
DR6R (D3)
DR7 (D4)
DR8 (E4)
DR9L (D3)
DR9R (D2)
JR10L (C2)
JR11L (C2)
JR12L (C2)
JR13 (C2)
JR14 (B2)
JR15 (B2)
JR16 (B2)
JR17 (B2)
JR18 (B2)
JR19 (B2)
JR1L (B3)
JR1R (A3)
JR20 (B2)
JR21L (A2)
JR21R (A2)
JR22L (A3)
JR22R (A2)
JR23 (A2)
JR24 (D3)
JR25 (E2)
JR26 (E1)
JR27 (F1)
JR28 (A6)
JR29 (E2)
JR2L (B3)
JR2R (C3)
JR3L (B3)
JR3R (B3)
JR4L (D4)
JR4R (D3)
JR5L (D4)
JR5R (D3)
JR6L (C3)
JR6R (C4)
JR7L (C5)
JR7R (C5)
JR8L (C5)
JR8R (C4)
JR9 (C2)
LR1 (B5)
LR2 (E5)
LR3 (A5)
LR4 (A5)
LR5 (A6)
LR6L (A4)
LR6R (A4)
RR1 (E5)
RR10 (C6)
RR11 (C6)
RR13 (C6)
RR2 (F6)
RR20 (A7)
RR21 (B6)
RR22 (A7)
RR24 (B6)
RR25 (B7)
RR26 (B7)
RR3 (F6)
RR4 (F6)
RR5 (D6)
RR6 (E6)
RR7 (D6)
RR8 (E6)
RR9 (E6)
UR1 (E5)
UR100 (G2)
UR101 (G2)
UR102 (G2)
UR103 (G2)
UR104 (H2)
UR113 (E2)
UR114 (E2)
UR115 (F2)
UR116 (F2)
UR117 (G2)
UR2 (F4)
UR3 (F4)
UR4 (F4)
UR5 (F5)
UR6 (G5)
UR62 (H2)
UR63 (E1)
UR64 (E1)
UR7 (F3)
UR8 (F5)
UR81 (G2)
UR82 (G2)
UR83 (H3)
UR84 (H3)
UR85 (H2)
UR86 (H2)
UR87 (H3)
UR88 (H3)
UR89 (H3)
UR9 (F4)
UR90 (H3)
UR91 (H1)
UR92 (H1)
UR93 (H1)
UR94 (H1)
UR95 (H6)
UR96 (H6)
UR97 (H6)
UR98 (E5)
UR99 (H4)

*** CONDENSER ***

CC1 (G1)
CC2 (A1)
CC3 (A3)
CC4 (C1)
DC10L (D2)
DC10R (D2)
DC11L (D3)
DC11R (D3)
DC12L (E5)
DC12R (D5)
DC13L (E5)
DC13R (B5)
DC14 (D5)
DC15 (B5)
DC16 (D5)
DC17 (D4)
DC1L (E4)
DC1R (E4)
DC2L (E5)
DC2R (E4)
DC3 (C5)
DC4 (E5)
DC5L (D5)
DC5R (D4)
DC6L (D4)
DC6R (D4)
DC7 (D5)
DC8 (D4)
DC9 (D6)
JC10L (D5)
JC10R (C3)
JC11L (C3)
JC11R (C3)
JC12L (C3)
JC12R (C3)
JC14 (C3)
JC15L (C3)
JC15R (C2)
JC16L (C3)
JC16R (C2)
JC17L (C3)
JC17R (D2)
JC18L (C3)
JC18R (C2)
JC19 (C2)
JC1L (A3)
JC1R (A3)
JC20 (B2)
JC21 (B2)
JC22 (B2)
JC23 (B2)
JC24L (B2)
JC24R (B2)
JC25L (A3)
JC25R (A2)
JC26 (D3)
JC27L (C4)
JC27R (C4)
JC2L (A3)
JC2R (A3)
JC3L (B3)
JC3R (B3)
JC4L (B3)
JC4R (B3)
JC5L (B3)
JC5R (B3)
JC6L (B3)
JC6R (B3)
JC7L (B3)
JC7R (B3)
JC8L (B3)
JC8R (A3)
JC9L (C3)
JC9R (C3)
LC1L (A5)
LC1R (A5)
LC2 (A5)
LC3 (A6)
LC4 (A5)
LC5 (A5)
LC7 (A5)
RC1 (I7)
RC11 (C6)
RC14 (C7)
RC15 (G7)
RC16 (H7)
RC2 (G7)
RC20 (C6)
RC21 (C7)
RC22 (B7)
RC23 (A6)
RC24 (B6)
RC25 (B6)
RC3 (C6)
RC5 (E6)
RC6 (E6)
RC8 (D6)
RC9 (D6)
UC1 (F4)
UC10 (E4)
UC13 (H6)
UC14 (H6)
UC15 (H6)
UC16 (E4)
UC2 (F5)
UC3 (E4)
UC4 (F6)
UC5 (F3)
UC6 (F3)
UC7 (G5)
UC8 (F6)
UC9 (G6)

*** DIODE ***

CD2 (A1)
CD3 (B1)
CD4 (D0)
CD6 (G1)
CD7 (F1)
CD8 (G1)
JD1L (A4)
JD1R (A4)
JD2L (A4)
JD2R (A4)
JD3L (A3)
JD3R (A3)
JD5 (E2)
JD6 (B1)
JZD1 (E2)
LD1 (C5)
RD1 (H7)
RD2 (H7)
RD20 (C7)
RD21 (C7)
RD22 (C7)
RD23 (C7)
RD3 (G5)
RD4 (D5)
RD5 (C7)
RD7 (H6)
RD8 (I6)
RD9 (E3)
RZD1 (F6)
RZD20 (A7)
RZD3 (C6)
UD1 (E5)
UD2 (E5)
UD3 (F4)
UD4 (F4)
UD6 (I2)
UZD1 (G5)
UZD2 (G5)

*** TR ***

CQ1 (D1)
CQ10 (G1)
CQ11 (C1)
CQ12 (G0)
CQ2 (D1)
CQ3 (D1)
CQ4 (D1)
CQ5 (B1)
CQ6 (F1)
CQ7 (F1)
CQ8 (G1)
CQ9 (G1)
DQ1L (D2)
DQ1R (D2)
DQ2 (B4)
DQ3 (B4)
DQ4 (B4)
DQ5L (B4)
DQ5R (B4)
DQ6L (C5)
DQ6R (C5)
DQ7 (B4)
DQ8 (C5)
JQ1L (A3)
JQ1R (A3)
JQ2L (B3)
JQ2R (A3)
JQ3 (A2)
JQ4L (A2)
JQ4R (A2)
JQ5 (B2)
LQ1 (B5)
LQ2 (B5)
LQ3 (A5)
RQ21 (C6)
RQ22 (A7)
RQ23 (A7)
RQ24 (B6)
RQ4 (C6)
RQ8 (E6)
RQ9 (F6)
UQ1 (F5)
UQ2 (H1)
UQ3 (H1)
UQ4 (H0)
UQ5 (I0)
UQ7 (H2)
UQ8 (H2)
UQ9 (H4)

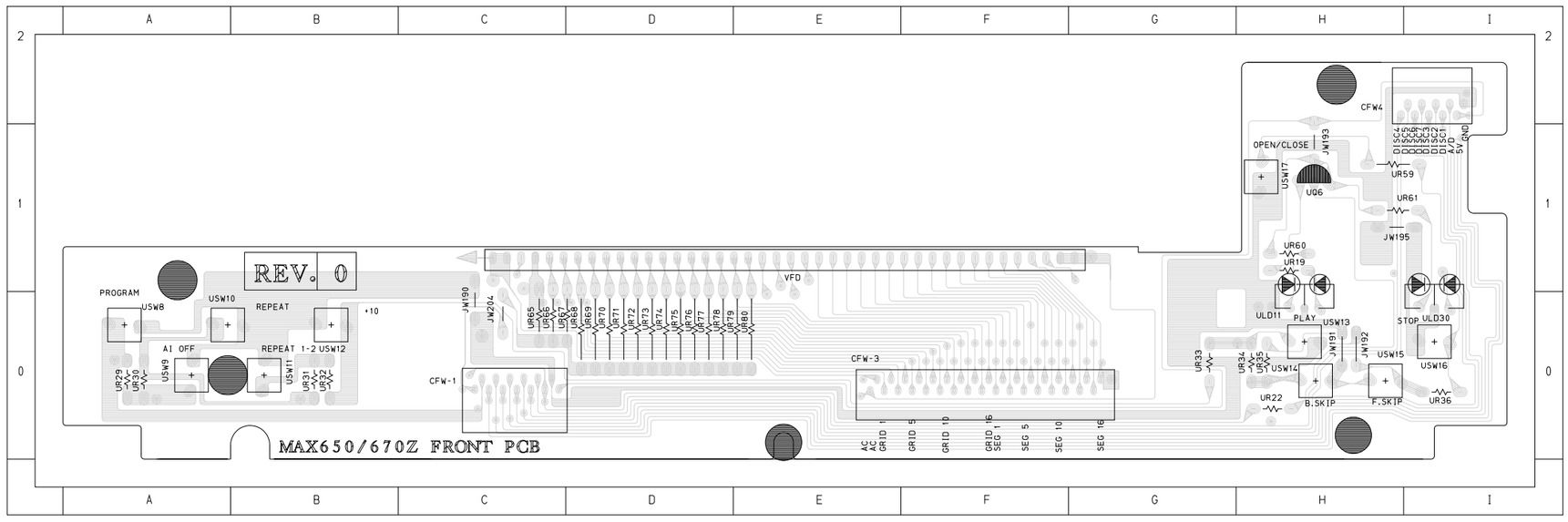
*** IC&WAFER ***

CDN1 (B6)
CDN2 (A6)
DIC1 (D4)
DIC2 (B4)
DIC3 (E5)
P/B HEAD (A3)
R/P HEAD (A4)
TP2 (A2)
TP3 (A4)
UIC1 (G4)
UIC3 (G2)

*** CHIP ***

JIC1 (B3)
JIC2 (E3)
UIC1 (G4)
UIC2 (F2)

10-2-2 Front



*** RESISTOR ***

UR19 (H1)
UR22 (H0)
UR29 (A0)
UR30 (A0)
UR31 (B0)
UR32 (B0)
UR33 (G0)
UR34 (H0)
UR35 (H0)
UR36 (I0)
UR59 (H1)
UR60 (H1)
UR61 (H1)
UR65 (C0)
UR66 (C0)
UR67 (D0)
UR68 (D0)
UR69 (D0)
UR70 (D0)
UR71 (D0)
UR72 (D0)
UR73 (D0)
UR74 (D0)
UR75 (D0)
UR76 (D0)
UR77 (D0)
UR78 (D0)
UR79 (E0)

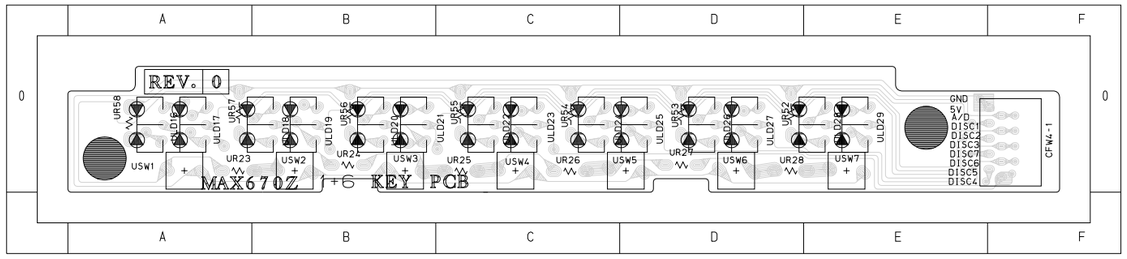
*** TR ***

UQ6 (H1)

*** IC&WAFER ***

USW10 (A0)
USW11 (B0)
USW12 (B0)
USW13 (H0)
USW14 (H0)
USW15 (H0)
USW16 (I0)
USW17 (H1)
USW8 (A0)
USW9 (A0)

10-2-3 6+1 Key



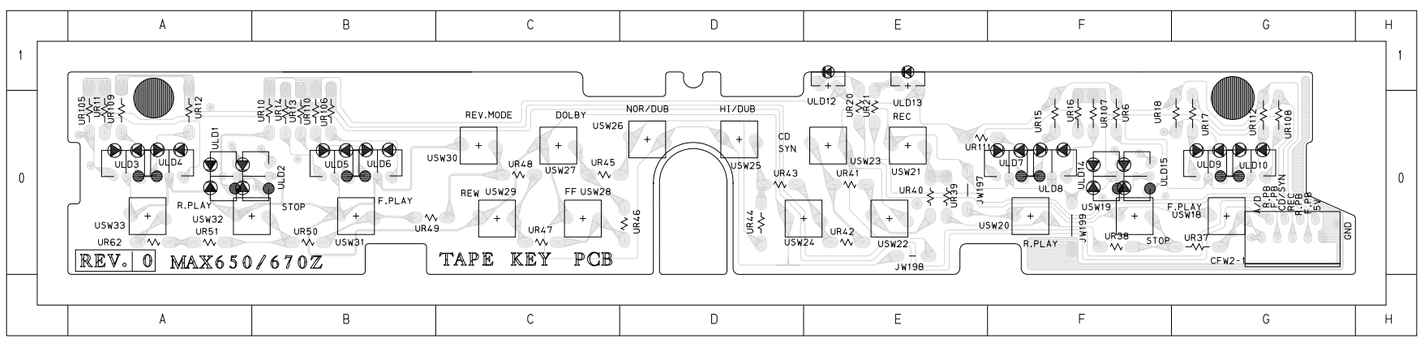
*** RESISTOR ***

UR23 (B0)
UR24 (B0)
UR25 (C0)
UR26 (C0)
UR27 (D0)
UR28 (E0)
UR52 (D0)
UR53 (D0)
UR54 (C0)
UR55 (C0)
UR56 (B0)
UR57 (A0)
UR58 (A0)

*** IC&WAFER ***

USW1 (A0)
USW2 (B0)
USW3 (B0)
USW4 (C0)
USW5 (D0)
USW6 (D0)
USW7 (E0)

10-2-4 Tape Key



*** RESISTOR ***

UR10 (B1)
UR105 (A1)
UR106 (B1)
UR107 (F0)
UR108 (G0)
UR109 (A1)
UR11 (A1)
UR110 (B1)
UR111 (E0)
UR112 (G0)
UR12 (A1)
UR13 (B1)
UR14 (B1)
UR15 (F0)
UR16 (F0)
UR17 (G0)
UR18 (G0)
UR20 (E0)
UR21 (E0)
UR37 (G0)
UR38 (F0)
UR39 (E0)
UR40 (E0)
UR41 (E0)
UR42 (E0)
UR43 (D0)
UR44 (C0)
UR45 (C0)
UR46 (B0)
UR47 (A0)
UR48 (A0)
UR49 (D0)
UR50 (E0)
UR51 (D0)
UR62 (A0)

*** TR ***

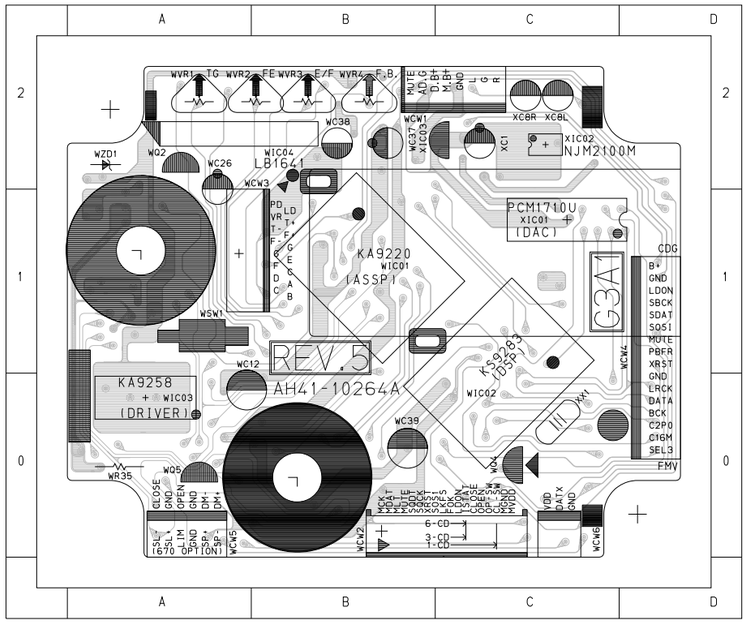
ULD1 (A0)
ULD10 (G0)
ULD14 (F0)
ULD15 (F0)
ULD2 (B0)
ULD3 (A0)
ULD4 (A0)
ULD5 (B0)
ULD6 (B0)
ULD7 (F0)
ULD8 (F0)
ULD9 (G0)

*** IC&WAFER ***

USW18 (G0)
USW19 (F0)
USW20 (F0)
USW21 (E0)
USW22 (E0)
USW23 (E0)
USW24 (E0)
USW25 (D0)
USW26 (D0)
USW27 (C0)
USW28 (C0)
USW29 (C0)
USW30 (C0)
USW31 (B0)
USW32 (B0)
USW33 (A0)

10-3 CD

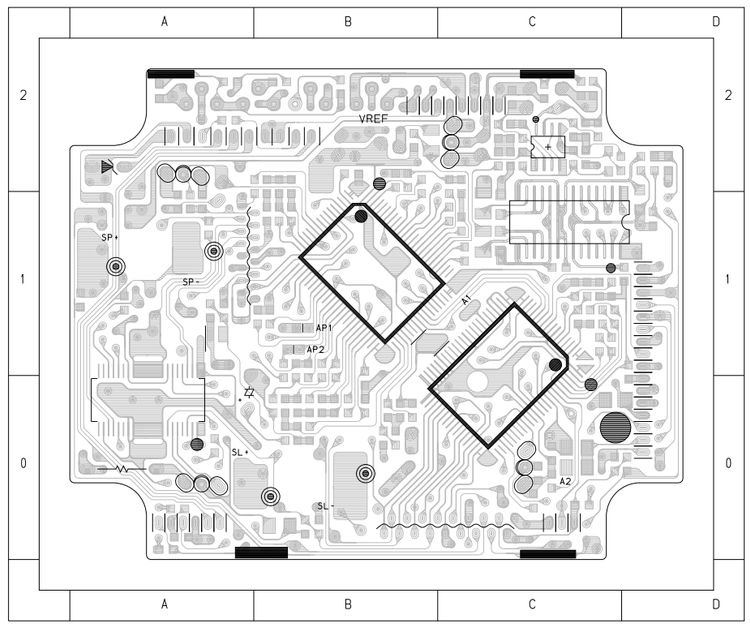
10-3-1 Top View



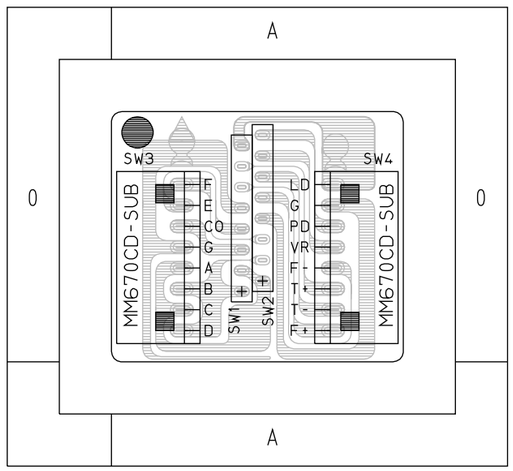
✱✱✱ CHIP ✱✱✱

WB1 (C0)	WC33 (B0)	WL1 (B0)	WR33 (B1)	XR2R (C2)
WB2 (C0)	WC34 (D0)	WR1 (B2)	WR34 (D2)	XR3L (C2)
WB3 (C0)	WC35 (C0)	WR10 (B0)	WR36 (C0)	XR3R (C2)
WC1 (B2)	WC36 (C0)	WR11 (B0)	WR37 (D1)	XR4L (C2)
WC10 (B0)	WC4 (C2)	WR12 (B0)	WR4 (B2)	XR4R (C2)
WC11 (B0)	WC40 (A2)	WR13 (B0)	WR5 (C1)	XR8 (C2)
WC13 (B0)	WC41 (D1)	WR14 (B0)	WR6 (C1)	XR9 (C2)
WC14 (B0)	WC42 (D1)	WR15 (B0)	WR7 (C1)	
WC15 (B0)	WC43 (C1)	WR16 (B0)	WR8 (B0)	
WC16 (B0)	WC44 (C0)	WR17 (B0)	WR9 (B0)	
WC17 (B1)	WC5 (C1)	WR18 (B1)	XC10 (D2)	
WC18 (B1)	WC6 (B2)	WR19 (B1)	XC2 (D1)	
WC19 (A2)	WC7 (C1)	WR2 (A1)	XC3 (C1)	
WC2 (B2)	WC8 (C1)	WR20 (B2)	XC4 (C1)	
WC20 (B1)	WC9 (B0)	WR21 (B2)	XC5L (C1)	
WC21 (A2)	WIC01 (B1)	WR22 (B2)	XC5R (C1)	
WC22 (B1)	WIC02 (C0)	WR23 (B2)	XC6L (C2)	
WC23 (B1)	WIC03 (A0)	WR24 (B2)	XC6R (C2)	
WC24 (B1)	WJW1 (B2)	WR25 (A1)	XC7L (C2)	
WC25 (B1)	WJW2 (A1)	WR26 (A1)	XC7R (C2)	
WC27 (A1)	WJW3 (A1)	WR27 (A1)	XC9 (C2)	
WC28 (B2)	WJW4 (A1)	WR28 (C0)	XIC01 (C1)	
WC29 (C1)	WJW5 (A0)	WR29 (C1)	XJW1 (C2)	
WC3 (C1)	WJW6 (A0)	WR3 (C2)	XJW2 (C2)	
WC30 (C1)	WJW7 (A0)	WR30 (C1)	XR1L (C2)	
WC31 (D2)	WJW8 (A0)	WR31 (C1)	XR1R (C2)	
WC32 (B0)	WJW9 (C0)	WR32 (C1)	XR2L (C2)	

10-3-2 Bottom View

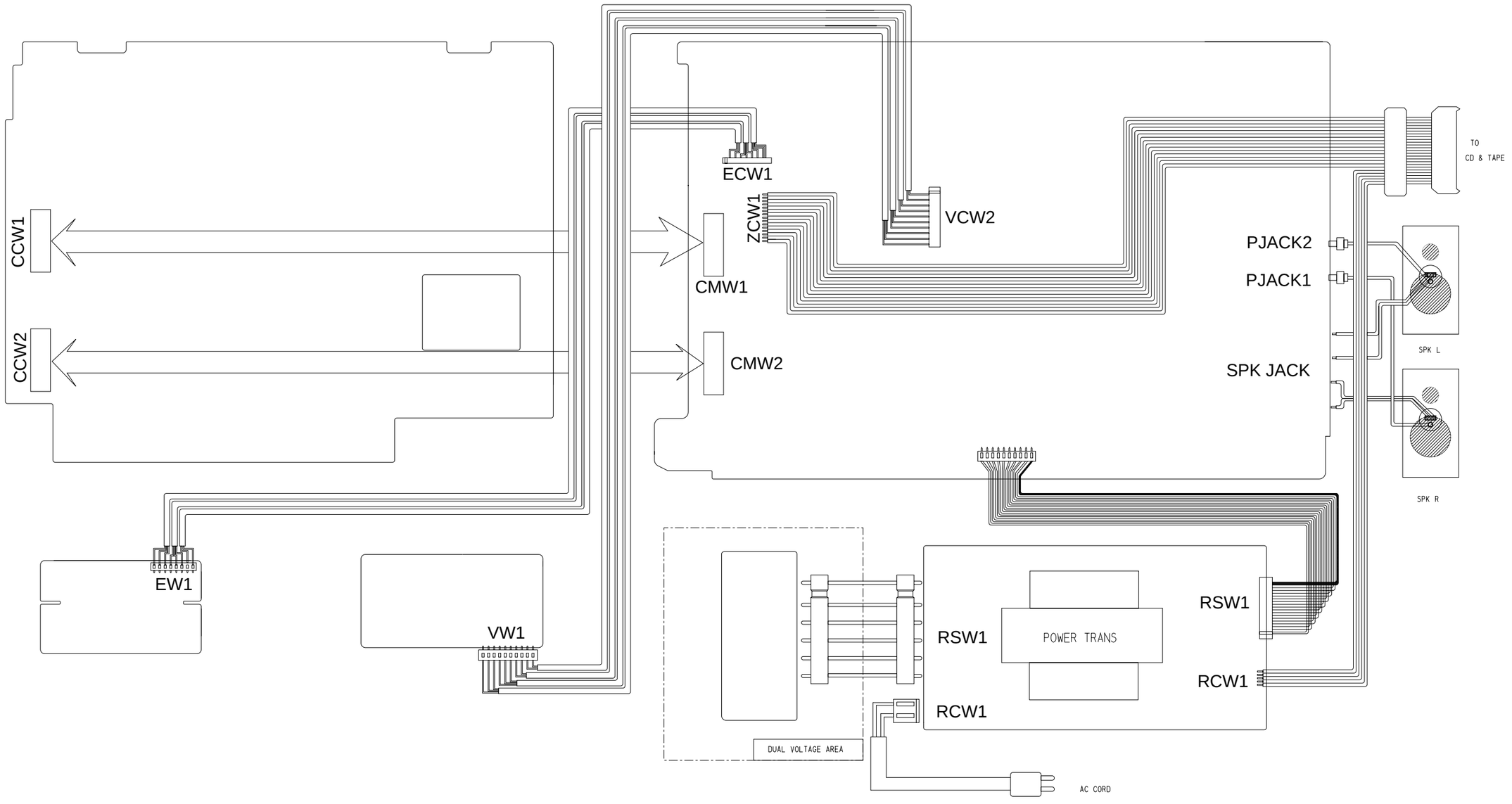


10-3-3 SUB

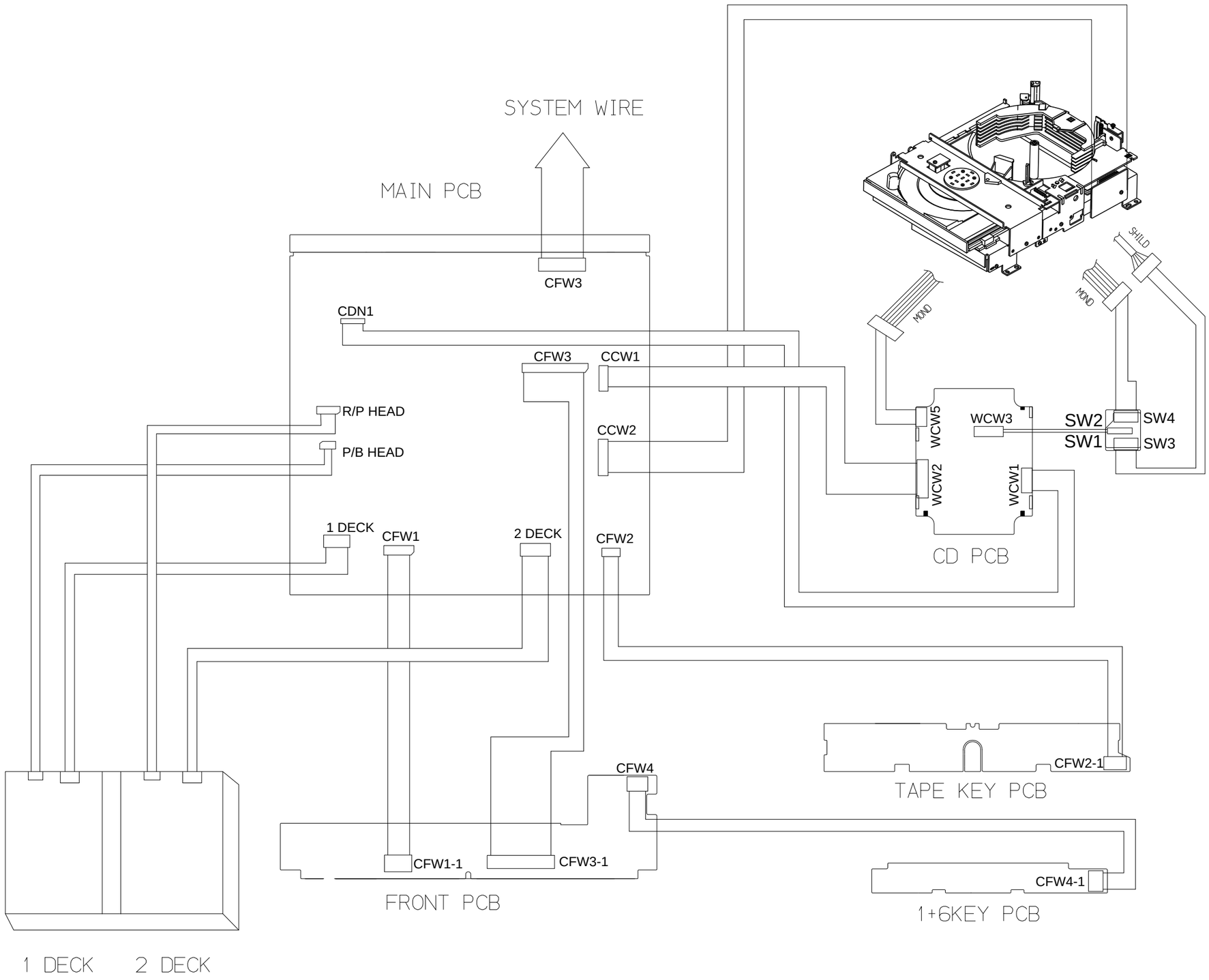


11. Wiring Diagrams

11-1 Amp and Tuner Section



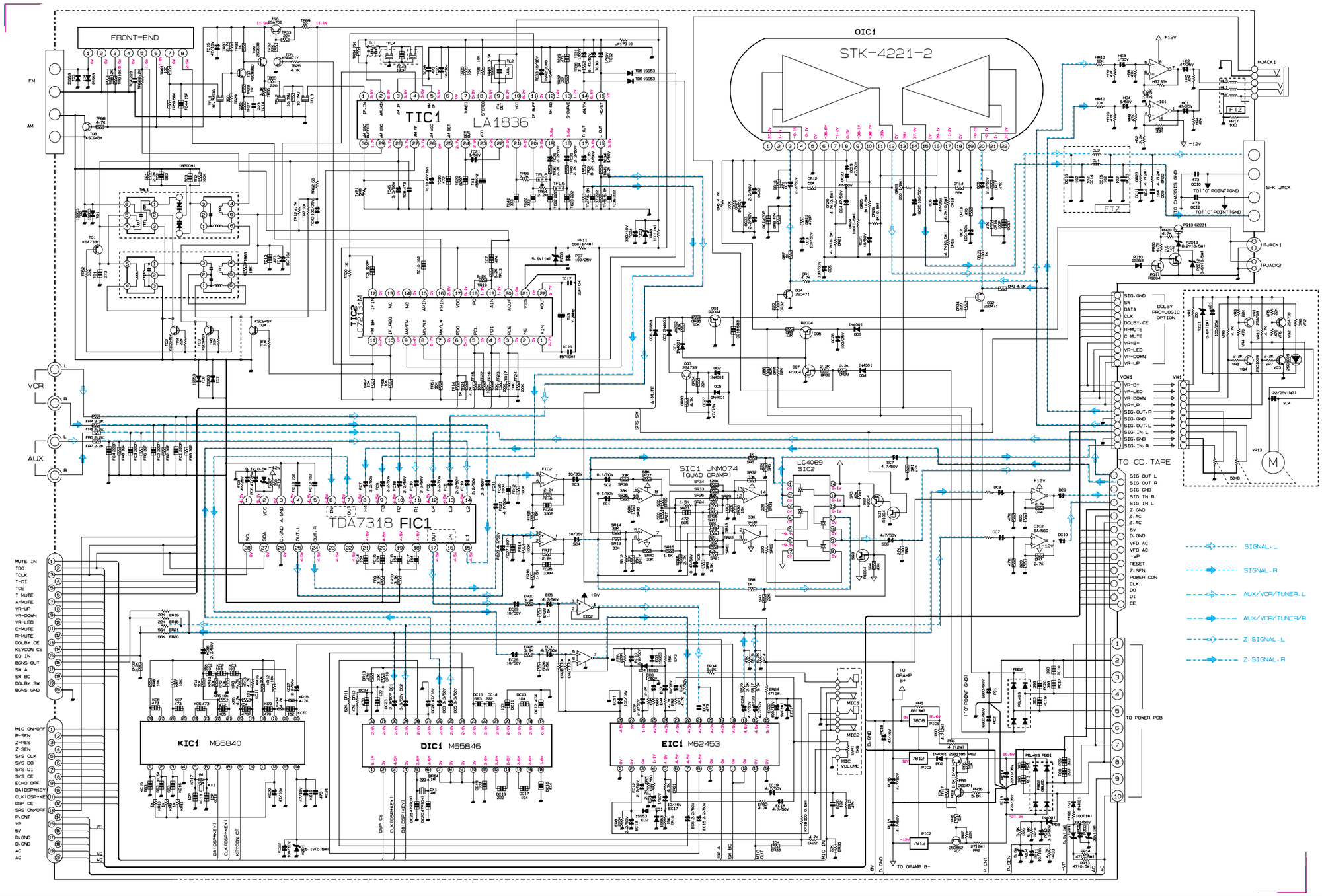
11-2 Cassette Deck and CD Section



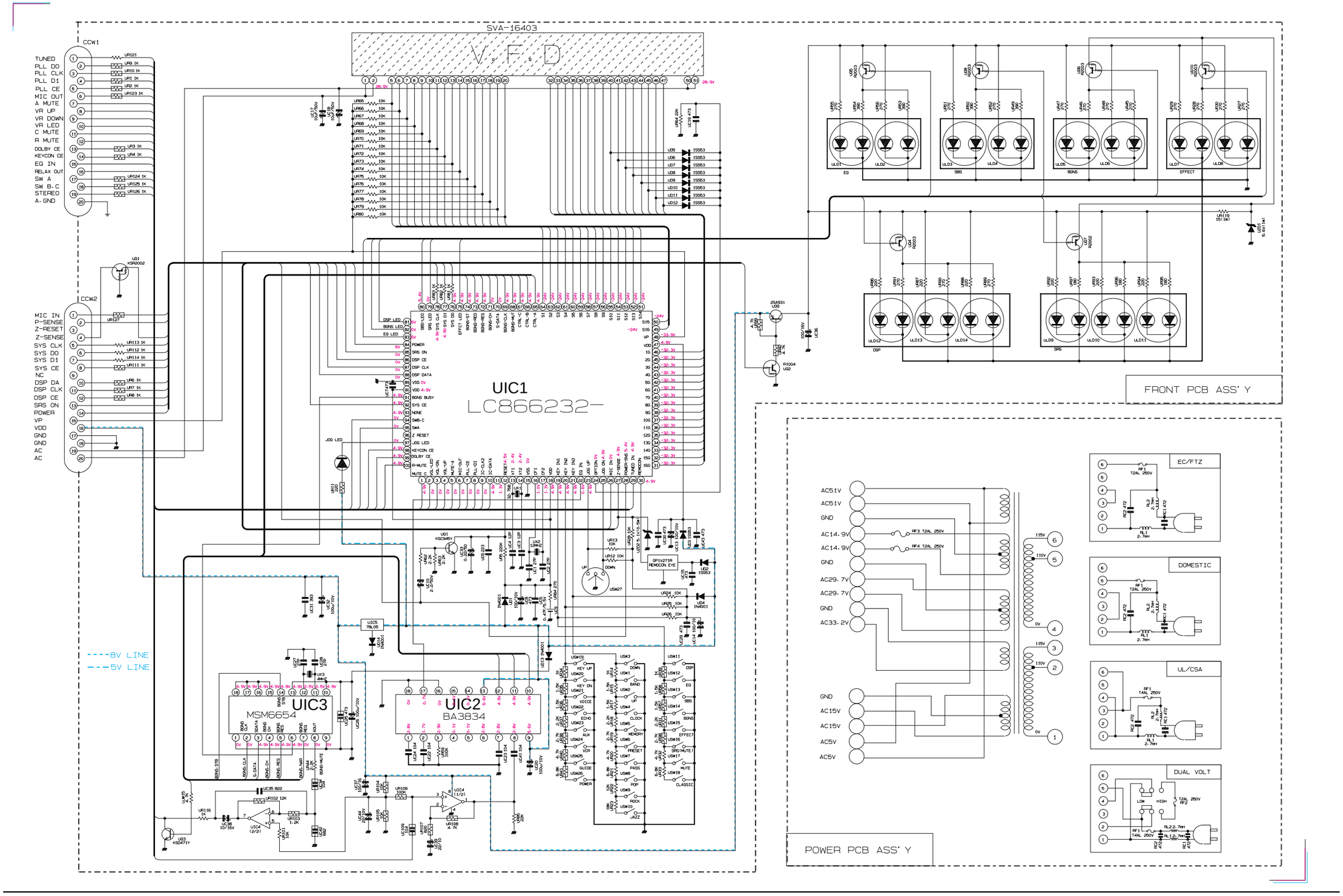
12. Schematic Diagrams

12-1 Amp and Tuner Section

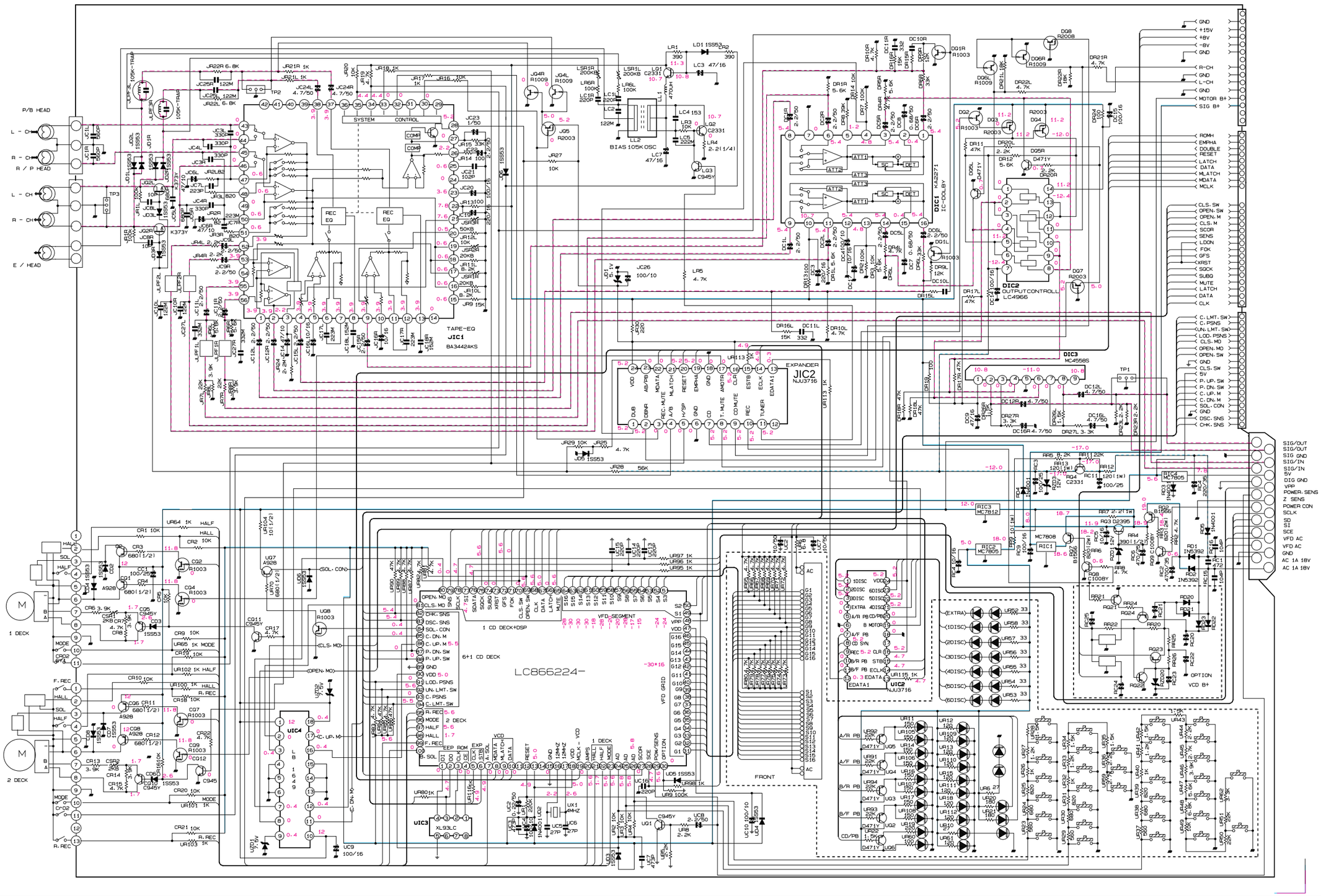
12-1-1 Main



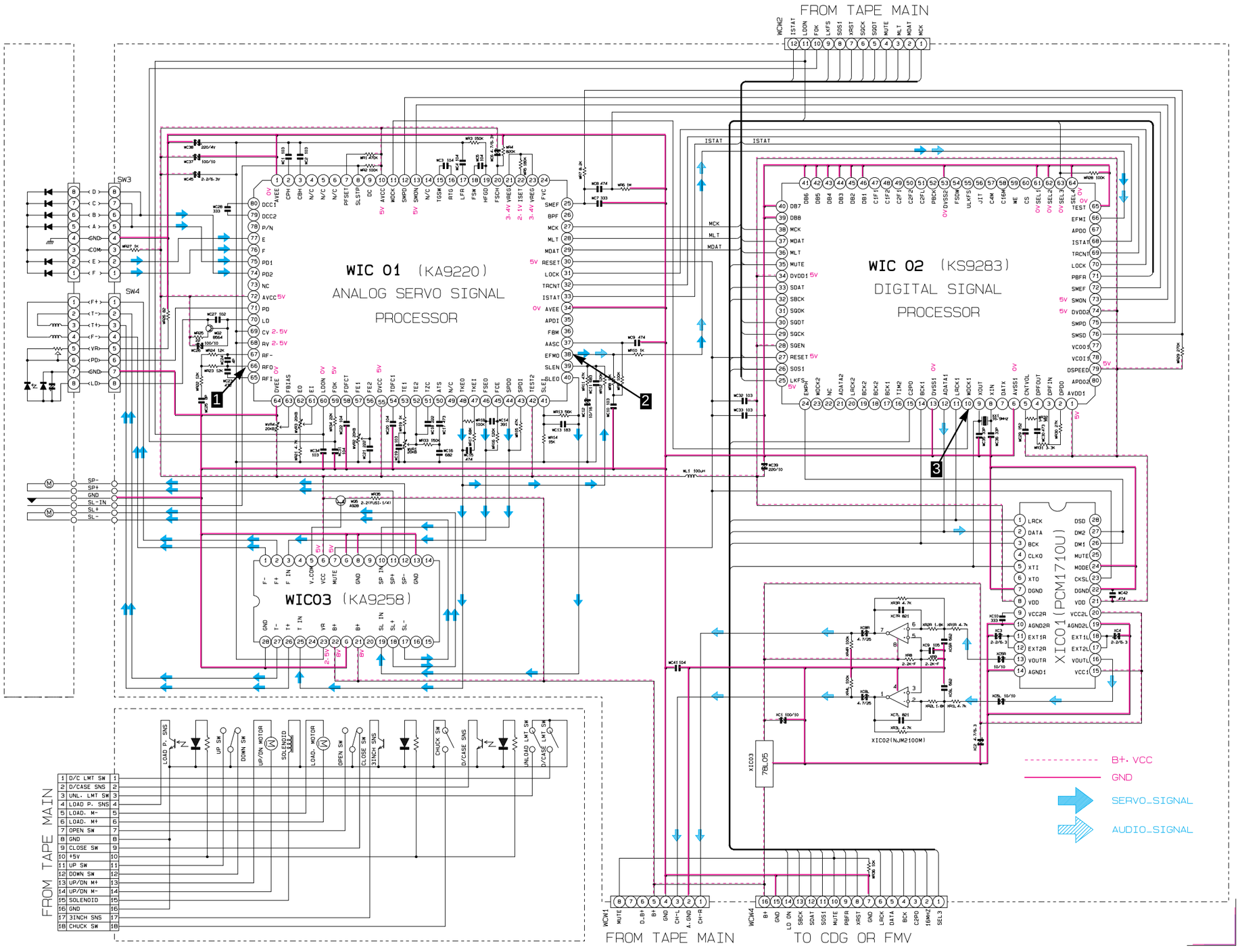
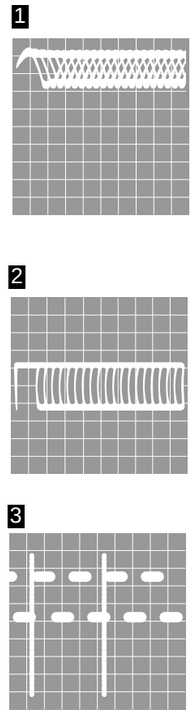
12-1-2 Front


SVA-16403
CCW1
TUNED
PLL DO
PLL CLK
PLL DI
PLL CE
MIC OUT
A MUTE
VR UP
VR DOWN
VR LED
C MUTE
R MUTE
DOLBY CE
KEYCON CE
EQ IN
RELAX OUT
SW A
SW B, C
STEREO
A. GND
CCW2
MIC IN
P-SENSE
Z-RESET
Z-SENSE
SYS CLK
SYS DO
SYS DI
SYS CE
NC
DSP DA
DSP CLK
DSP CE
SRS ON
POWER
VP
VDD
GND
GND
AC
AC
UIC1
LC866232-
UIC2
BA3834
UIC3
MSM6654
UIC5
78L05
JOG LED
DSP LED
BGNS LED
EQ LED
SRS-LED
SPS LED
SYS CLK
SYS DO
SYS DI
BGNS-SEL
BGNS-RES
BGNS-CH
S-DATA
BGNS-MUT
CTRL-S
CTRL-A
DOWN
UP
GP1V271R
REMOCON EYE
2SA931
EQ
SBS
BGNS
EFFECT
DSP
SRS
FRONT PCB ASS' Y
POWER PCB ASS' Y
AC51V
AC51V
GND
AC14.9V
AC14.9V
GND
AC29.7V
AC29.7V
GND
AC33.2V
GND
AC15V
AC15V
AC5V
AC5V
EC/FTZ
DOMESTIC
UL/CSA
DUAL VOLT
---8V LINE
---5V LINE

12-2 Cassette Deck Section



12-3 CD


FROM TAPE MAIN
WIC 01 (KA9220)
ANALOG SERVO SIGNAL
PROCESSOR
WIC 02 (KS9283)
DIGITAL SIGNAL
PROCESSOR
WIC03 (KA9258)
XIC01(PCM1710U)
XIC02(NJM2100M)
XIC03
7BL05
SW3
SW4
SP-
SP+
GND
SL-IN
SL+
SL-
FROM TAPE MAIN
LOAD P. SNS
UP SW
DOWN SW
UP/DN MOTOR
SOLENOID
LOAD. MOTOR
OPEN SW
CLOSE SW
31INCH SNS
CHUCK SW
D/CASE SNS
UNLOAD LMT SW
D/CASE LMT SW
1 D/C LMT SW 1
2 D/CASE SNS 2
3 UNL. LMT SW 3
4 LOAD P. SNS 4
5 LOAD. M- 5
6 LOAD. M+ 6
7 OPEN SW 7
8 GND 8
9 CLOSE SW 9
10 +5V 10
11 UP SW 11
12 DOWN SW 12
13 UP/DN M+ 13
14 UP/DN M- 14
15 SOLENOID 15
16 GND 16
17 31INCH SNS 17
18 CHUCK SW 18
FROM TAPE MAIN
TO CDG OR FMV
B+. VCC
GND
SERVO_SIGNAL
AUDIO_SIGNAL